Baskar, P
10/009916

-Key terms

(FILE 'CAPLUS' ENTERED AT 14:10:45 ON 03 SEP 2004)
L1 42 SEA FILE=CAPLUS ABB=ON PLU=ON (LAWSON? OR L)(W)INTRACELLUL? AND (POLYPEPTIDE OR PEPTIDE OR PROTEIN OR POLYPROTEIN)
L2 11 SEA FILE=CAPLUS ABB=ON PLU=ON L1 AND ANTIBOD?

L2 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 23 Apr 2004
ACCESSION NUMBER: 2004:333823 CAPLUS
DOCUMENT NUMBER: 140:351646
TITLE: Nucleic acid and **polypeptide** sequences from **Lawsonia intracellularis** and their use for diagnosis and prevention of proliferative enteropathy in swine
INVENTOR(S): Kapur, Vivek; Gebhart, Connie J.
PATENT ASSIGNEE(S): Regents of the University of Minnesota, USA
SOURCE: PCT Int. Appl., 87 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004033631	A2	20040422	WO 2003-US31318	20031001

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-416395P P 20021004

AB The present invention provides nucleic acid mols. unique to **Lawsonia intracellularis**. Complete genome sequences were determined for the **L. intracellularis** chromosome and three plasmids. The invention also provides **polypeptides** encoded by **L. intracellularis**-specific nucleic acid mols., and **antibodies** having specific binding affinity for the **L. intracellularis**-specific **polypeptides**. The invention further provides methods for detection of **L. intracellularis** in a sample using nucleic acid mols., **polypeptides**, and **antibodies** of the invention. The invention addnl. provides methods of preventing a **L. intracellularis** infection in an animal.

L2 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 05 Jul 2002
ACCESSION NUMBER: 2002:503432 CAPLUS
DOCUMENT NUMBER: 137:77871
TITLE: Cloning of genes for novel **Lawsonia intracellularis** outer membrane

proteins and their use in preparing vaccines for porcine proliferative enteropathy
INVENTOR(S): Jacobs, Antonius A. C.; Vermeij, Paul
PATENT ASSIGNEE(S): Akzo Nobel N.V., Neth.
SOURCE: Eur. Pat. Appl., 26 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1219711	A2	20020703	EP 2001-204919	20011214
EP 1219711	A3	20021106		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003000276	A2	20030107	JP 2001-385373	20011219
AU 2001097371	A5	20020627	AU 2001-97371	20011220
PRIORITY APPLN. INFO.:			EP 2000-204660 A	20001220

AB The present invention relates i.a. to nucleic acid sequences encoding novel **Lawsonia intracellularis proteins**. It furthermore relates to DNA fragments, recombinant DNA mols. and live recombinant carriers comprising these sequences. Also it relates to host cells comprising such nucleic acid sequences, DNA fragments, recombinant DNA mols. and live recombinant carriers. Moreover, the invention relates to **proteins** encoded by these nucleotide sequences. The invention also relates to vaccines for combating **Lawsonia intracellularis** infections and methods for the preparation thereof. Finally the invention relates to diagnostic tests for the detection of **Lawsonia intracellularis** DNA, the detection of **Lawsonia intracellularis** antigens and of **antibodies** against **Lawsonia intracellularis**.

L2 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 03 Jun 2002
ACCESSION NUMBER: 2002:415165 CAPLUS
DOCUMENT NUMBER: 137:137337
TITLE: LsaA, an antigen involved in cell attachment and invasion, is expressed by **Lawsonia intracellularis** during infection in vitro and in vivo
AUTHOR(S): McCluskey, Jackie; Hannigan, Joanne; Harris, Jennifer D.; Wren, Brendan; Smith, David G. E.
CORPORATE SOURCE: Zoonotic & Animal Pathogens Research Laboratory, Department of Medical Microbiology, University of Edinburgh, Edinburgh, UK
SOURCE: Infection and Immunity (2002), 70(6), 2899-2907
CODEN: INFIBR; ISSN: 0019-9567
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB **Lawsonia intracellularis** has been identified recently as the etiol. agent of proliferative enteropathies, which are characterized by intestinal epithelial hyperplasia and associated moderate immune responses. This disease complex has been reported in a broad range

of animals, prevalently in pigs, and **L. intracellularis** has been linked with ulcerative colitis in humans. **L. intracellularis** is an obligate intracellular bacterium, and the pathogenic mechanisms used to cause disease are unknown. Using in vitro-grown organisms as a source of genomic DNA, we identified a Lawsonia gene which encodes a surface antigen, LsaA (for Lawsonia surface antigen), associated with attachment to and entry into cells. The deduced amino acid sequence of this **protein** showed some similarity to members of a novel **protein** family identified in a number of other bacterial pathogens but for which roles are not fully defined. Transcription of this gene was detected by reverse transcription-PCR in **L. intracellularis** grown in vitro in IEC18 cells and in bacteria present in ileal tissue from infected animals. Immunohistochem. with specific monoclonal **antibody** and immunoblotting with sera from infected animals demonstrated that LsaA **protein** is synthesized by **L. intracellularis** during infection. Expression of this gene during infection in vitro and in vivo suggests that this surface antigen is involved during infection, and phenotypic anal. indicated a role during **L. intracellularis** attachment to and entry into intestinal epithelial cells.

REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 26 Apr 2001
ACCESSION NUMBER: 2001:297553 CAPLUS
DOCUMENT NUMBER: 134:321599
TITLE: Cloning of Lawsonia genes htrA, ponA, hypC, lysS, ycfW, abc1, and omp100, their encoded **proteins** or **peptides** and therapeutic use in diagnosis and as vaccine
INVENTOR(S): Rosey, Everett Lee
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: Eur. Pat. Appl., 80 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1094070	A2	20010425	EP 2000-309125	20001017
EP 1094070	A3	20020109		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6605696	B1	20030812	US 2000-689065	20001012
JP 2001169787	A2	20010626	JP 2000-320736	20001020
US 2003021802	A1	20030130	US 2002-210296	20020801
US 2003202983	A1	20031030	US 2003-449462	20030529
JP 2004229667	A2	20040819	JP 2004-92095	20040326
PRIORITY APPLN. INFO.:			US 1999-160922P	P 19991022
			US 1999-163858P	P 19991105
			US 2000-689065	A1 20001012
			JP 2000-320736	A3 20001020

AB The present invention relates generally to therapeutic compns. for the

treatment and/or prophylaxis of intestinal disease conditions in pigs or other animals caused or exacerbated by **Lawsonia intracellularis** or similar or otherwise related microorganism, such as porcine proliferative enteropathy (PPE). In particular, the present invention provides novel genes htrA, ponA, hypC, lysS, ycfW, abc1, and omp100 derived from **Lawsonia intracellularis** genomic regions A and B. These genes encode sequence homologs to lysyl-tRNA synthetase (gene lysS), transmembrane or integral membrane **protein** (abc1), hydrogenase maturation **protein** (hypC), penicillin binding **protein** (ponA), and periplasmic serine protease **protein** (htrA) resp. The invention also relates to constructing these gene expression vector to produce recombinant **protein** using E. coli. Methods of expressing recombinant htrA and omp100 **proteins** in E. coli are also provided. The invention also provides the immunogenic **peptides** or **proteins** encoded by these genes that are particularly useful as an antigen in vaccine preparation for conferring humoral immunity against **Lawsonia intracellularis** and related pathogens in animal hosts. The present invention is also directed to methods for the treatment and/or prophylaxis of such intestinal disease conditions and to diagnostic agents and procedures for detecting **Lawsonia intracellularis** or similar or otherwise related microorganisms.

L2 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 24 Nov 2000
ACCESSION NUMBER: 2000:824297 CAPLUS
DOCUMENT NUMBER: 134:1364
TITLE: Lawsonia-derived gene tlyA and related hemolysin **polypeptides, peptides** and **proteins** and their uses for diagnosis and treatment of avian and porcine infections
INVENTOR(S): Panaccio, Michael; Rosey, Everett Lee; Hasse, Detlef; Ankenbauer, Robert Gerard
PATENT ASSIGNEE(S): Pfizer Products Inc, USA; Agriculture Victoria Services Pty Ltd; Pig Research and Development Corporation
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069906	A1	20001123	WO 2000-AU439	20000511
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1177213	A1	20020206	EP 2000-924978	20000511

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

NZ 515363	A	20030725	NZ 2000-515363		20000511
AU 775323	B2	20040729	AU 2000-43861		20000511
PRIORITY APPLN. INFO.:			US 1999-134022P	P	19990513
			WO 2000-AU439	W	20000511

AB The present invention relates generally to therapeutic compns. for the treatment and/or prophylaxis of intestinal disease conditions in animals and birds caused or exacerbated by **Lawsonia intracellularis** or similar or otherwise related microorganism. In particular, the present invention provides a novel gene derived from **Lawsonia intracellularis** which encodes an immunogenic TylA hemolysin **peptide, polypeptide** or **protein** that is particularly useful as an antigen in vaccine preparation for conferring humoral immunity against **Lawsonia intracellularis** and related pathogens in animal hosts. The present invention is also directed to methods for the treatment and/or prophylaxis of such intestinal disease conditions and to diagnostic agents and procedures for detecting **Lawsonia intracellularis** or similar or otherwise related microorganisms.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 24 Nov 2000
ACCESSION NUMBER: 2000:824296 CAPLUS
DOCUMENT NUMBER: 134:14022
TITLE: Lawsonia-derived gene ompH and related outer membrane **protein** H **polypeptides, peptides** and **proteins** and their uses for diagnosis and treatment of avian and porcine infections
INVENTOR(S): Hasse, Detlef; Panaccio, Michael; Sinistaj, Meri
PATENT ASSIGNEE(S): Pig Research and Development Corporation, Australia; Agriculture Victoria Services Pty Ltd
SOURCE: PCT Int. Appl., 85 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069905	A1	20001123	WO 2000-AU438	20000511
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1183268	A1	20020306	EP 2000-924977	20000511

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

BR 2000011290	A	20020521	BR 2000-11290	20000511
NZ 515330	A	20030429	NZ 2000-515330	20000511
JP 2003521881	T2	20030722	JP 2000-618321	20000511
AU 767390	B2	20031106	AU 2000-43860	20000511
PRIORITY APPLN. INFO.:			US 1999-133986P	P 19990513
			WO 2000-AU438	W 20000511

AB The present invention relates generally to therapeutic compns. for the treatment and/or prophylaxis of intestinal disease conditions in animals and birds caused or exacerbated by **Lawsonia intracellularis** or similar or otherwise related microorganism. In particular, the present invention provides a novel gene derived from **Lawsonia intracellularis** which encodes an immunogenic OmpH outer membrane **peptide, polypeptide** or **protein** that is particularly useful as an antigen in vaccine preparation for conferring humoral immunity against **Lawsonia intracellularis** and related pathogens in animal hosts. The present invention is also directed to methods for the treatment and/or prophylaxis of such intestinal disease conditions and to diagnostic agents and procedures for detecting **Lawsonia intracellularis** or similar or otherwise related microorganisms.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 24 Nov 2000
ACCESSION NUMBER: 2000:824295 CAPLUS
DOCUMENT NUMBER: 133:359825
TITLE: Lawsonia-derived gene flgE and related flagellar hook **polypeptides, peptides** and **proteins** and their uses for diagnosis and treatment of avian and porcine infections
INVENTOR(S): Panaccio, Michael; Rosey, Everett Lee; Sinistaj, Meri; Hasse, Detlef; Parsons, Jim; Ankenbauer, Robert Gerard
PATENT ASSIGNEE(S): Pfizer Products Inc., USA; Agriculture Victoria Services Pty Ltd; Pig Research and Development Corporation
SOURCE: PCT Int. Appl., 97 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069904	A1	20001123	WO 2000-AU437	20000511

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,

CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

BR 2000011294	A	20020226	BR 2000-11294	20000511
EP 1181315	A1	20020227	EP 2000-924976	20000511
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2003516113	T2	20030513	JP 2000-618320	20000511
NZ 515331	A	20030725	NZ 2000-515331	20000511
AU 771376	B2	20040318	AU 2000-43859	20000511
US 2003157120	A1	20030821	US 2002-9823	20020813
PRIORITY APPLN. INFO.:			US 1999-133973P P	19990513
			WO 2000-AU437 W	20000511

AB The present invention relates generally to therapeutic compns. for the treatment and/or prophylaxis of intestinal disease conditions in animals and birds caused or exacerbated by **Lawsonia intracellularis** or similar or otherwise related microorganism. In particular, the present invention provides a novel gene derived from **Lawsonia intracellularis** which encodes an immunogenic FlgE flagellar hook **peptide, polypeptide** or **protein** that is particularly useful as an antigen in vaccine preparation for conferring humoral immunity against **Lawsonia intracellularis** and related pathogens in animal hosts. The present invention is also directed to methods for the treatment and/or prophylaxis of such intestinal disease conditions and to diagnostic agents and procedures for detecting **Lawsonia intracellularis** or similar or otherwise related microorganisms.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 24 Nov 2000
ACCESSION NUMBER: 2000:824294 CAPLUS
DOCUMENT NUMBER: 133:359824
TITLE: Lawsonia-derived gene sodC and related superoxide dismutase **polypeptides, peptides** and **proteins** and their uses for diagnosis and treatment of avian and porcine infections
INVENTOR(S): Ankenbauer, Robert Gerard; Hasse, Detlef; Panaccio, Michael; Rosey, Everett Lee; Wright, Catherine
PATENT ASSIGNEE(S): Pfizer Products, Inc., USA; Pig Research and Development Corp.; Agriculture Victoria Services Pty., Ltd.
SOURCE: PCT Int. Appl., 85 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069903	A1	20001123	WO 2000-AU436	20000511
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA,				

ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1177212	A1	20020206	EP 2000-924975		20000511
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
BR 2000011292	A	20020226	BR 2000-11292		20000511
JP 2003501013	T2	20030114	JP 2000-618319		20000511
NZ 515332	A	20040130	NZ 2000-515332		20000511
PRIORITY APPLN. INFO.:			US 1999-133989P	P	19990513
			WO 2000-AU436	W	20000511

AB The present invention relates generally to therapeutic compns. for the treatment and/or prophylaxis of intestinal disease conditions in animals and birds caused or exacerbated by **Lawsonia intracellularis** or similar or otherwise related microorganism. In particular, the present invention provides a novel gene derived from **Lawsonia intracellularis** which encodes an immunogenic SodC superoxide dismutase **peptide, polypeptide** or **protein** that is particularly useful as an antigen in vaccine preparation for conferring humoral immunity against **Lawsonia intracellularis** and related pathogens in animal hosts. The present invention is also directed to methods for the treatment and/or prophylaxis of such intestinal disease conditions and to diagnostic agents and procedures for detecting **Lawsonia intracellularis** or similar or otherwise related microorganisms.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 24 Aug 2000
ACCESSION NUMBER: 2000:588529 CAPLUS
DOCUMENT NUMBER: 134:290822
TITLE: Immunohistochemistry and polymerase chain reaction for the detection of **Lawsonia intracellularis** in porcine intestinal tissues with proliferative enteropathy
AUTHOR(S): Kim, Junghyun; Choi, Changsun; Cho, Wan-Seob; Chae, Chanhee
CORPORATE SOURCE: Department of Veterinary Pathology, College of Veterinary Medicine and School of Agricultural Biotechnology, Seoul National University, Suwon, 441-744, S. Korea
SOURCE: Journal of Veterinary Medical Science (2000), 62(7), 771-773
CODEN: JVMSEQ; ISSN: 0916-7250
PUBLISHER: Japanese Society of Veterinary Science
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Detection method of **Lawsonia intracellularis** was studied in formalin-fixed paraffin-embedded intestinal tissues from 5 naturally infected pigs by immunohistochem. with a monoclonal **antibody** against outer membrane **protein** of **L. intracellularis**. Warthin-Starry silver stain revealed clusters of argyrophilic, slightly curved rod-shaped organisms in the apical cytoplasm of enterocytes. Immunohistochem. staining with a **L.**

intracellularis-specific monoclonal **antibody** confirmed the presence of the organism in the apical cytoplasm of hyperplastic enterocytes. The presence of **L. intracellularis** in the ileum of pig with proliferative enteropathy was confirmed by PCR further on the basis of amplification of 319-bp products specific for porcine **L. intracellularis** chromosomal DNA. Immunohistochem. and PCR may be a complementary method to confirm the diagnosis of **L. intracellularis** infection in pigs.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 23 Apr 1997
ACCESSION NUMBER: 1997:260161 CAPLUS
DOCUMENT NUMBER: 126:315726
TITLE: In-vitro interactions of **Lawsonia intracellularis** with cultured enterocytes
AUTHOR(S): McOrist, Steven; Mackie, Rebecca A.; Lawson, Gordon H. K.; Smith, David G. E.
CORPORATE SOURCE: Department Veterinary Pathology, University Edinburgh, Midlothian, EH25 9RG, UK
SOURCE: Veterinary Microbiology (1997), 54(3,4), 385-392
CODEN: VMICDQ; ISSN: 0378-1135
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Strains of the obligately intracellular bacterium **Lawsonia intracellularis**, the etiol. agent of porcine proliferative enteropathy, were co-cultured in rat enterocyte cell cultures (IEC-18) and examined ultrastructurally. No regular surface arrays typical of surface or S-layers were visible on any bacterial strain, with or without Triton-X-100 detergent treatment. In sep. expts., there was no difference in the ability of **L. intracellularis** to attach and enter enterocytes with or without the presence of added bovine plasma fibronectin, or the **peptide** Arg-Gly-Ser. Interestingly, there was an increase in the invasiveness of **L. intracellularis** in the presence of the **peptide** Arg-Gly-Asp (RGD), in a dose-related manner. A reduction was observed in the ability of **L. intracellularis** to invade enterocytes in the presence of monovalent fragments of IgG monoclonal **antibodies** to an outer surface component of **L. intracellularis**. This neutralization showed an **antibody** concentration-dependent titration effect and was not apparent with co-cultures incorporating control **antibodies**. The exact nature of ligand and cell receptor interactions for **L. intracellularis** remain to be determined

L2 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 30 Mar 1993
ACCESSION NUMBER: 1993:119859 CAPLUS
DOCUMENT NUMBER: 118:119859
TITLE: Expression of mouse cathepsin L cDNA in Saccharomyces cerevisiae: evidence that cathepsin L is sorted for targeting to yeast vacuole
AUTHOR(S): Nishimura, Yukio; Kato, Keitaro
CORPORATE SOURCE: Fac. Pharm. Sci., Kyushu Univ., Fukuoka, 812, Japan

SOURCE: Archives of Biochemistry and Biophysics (1992), 298(2), 318-24
CODEN: ABBIA4; ISSN: 0003-9861
DOCUMENT TYPE: Journal
LANGUAGE: English

AB To investigate the intracellular transport mechanism of lysosomal cathepsin L in yeast cells, mouse cathepsin L was expressed in S. cerevisiae by placing the coding region under the control of the promoter of the yeast glyceraldehyde 3-phosphate dehydrogenase (GAPDH) gene. Immunoblotting anal. with an **antibody** specific for rat cathepsin L revealed that yeast cells carrying the cathepsin L coding sequence produced 39- and 30-kDa products, which correspond to rat procathepsin L and the single-chain form of mature cathepsin L, resp. The precursor **polypeptide** showed sensitivity toward endoglycosidase H treatment. Cell fractionation expts. demonstrated that the processed form of 30-kDa cathepsin L was colocalized to the yeast vacuole with the marker enzyme carboxypeptidase Y in a Ficoll step gradient. In the prepared vacuolar fraction, a considerable amount of cathepsin L cofractionated with the vacuolar membranes. Furthermore, phase separation expts. with Triton X-114 provided the first evidence showing that the mature form of cathespin L **polypeptide** is strongly associated with the vacuolar membranes. Therefore, the present results suggest that the mouse cathepsin L precursor is initially synthesized as the proenzyme in yeast cells and then correctly delivered to the vacuole. During the intracellular sorting pathway, procathepsin L undergoes post-translational proteolytic processing to generate the mature enzyme. Based on these lines of evidence, it is proposed that cathepsin L is recognized by mechanisms similar to those for the intracellular sorting and processing of vacuolar **proteins** in the yeast cells.

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO, CABA, AGRICOLA, VETU, VETB' ENTERED AT 14:14:01 ON 03 SEP 2004)
L3 36 S L2
L4 21 DUP REM L3 (15 DUPLICATES REMOVED)

L4 ANSWER 1 OF 21 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2004-340902 [31] WPIDS
DOC. NO. CPI: C2004-129513
TITLE: New nucleic acid that generates an amplification product from **L. intracellularis** nucleic acid using an appropriate second nucleic acid molecule, useful for treating and preventing **L. intracellularis** infection.
DERWENT CLASS: B04 C06 D16
INVENTOR(S): GEBHART, C J; KAPUR, V
PATENT ASSIGNEE(S): (MINU) UNIV MINNESOTA
COUNTRY COUNT: 106
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2004033631	A2	20040422	(200431)*	EN	87

RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP

KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004033631	A2	WO 2003-US31318	20031001

PRIORITY APPLN. INFO: US 2002-416395P 20021004
AN 2004-340902 [31] WPIDS
AB WO2004033631 A UPAB: 20040514
NOVELTY - An isolated nucleic acid comprising a nucleic acid molecule of at least 10 nucleotides in length having at least 75% identity to a sequence not defined in the specification, where any of the molecule that is 10-29 nucleotides in length, under standard amplification conditions, generates an amplification product from **L. intracellularis** nucleic acid using an appropriate second nucleic acid molecule, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a vector comprising the nucleic acid;
(2) a host cell comprising the vector;
(3) an isolated **polypeptide** encoded by the nucleic acid;
(4) an article of manufacture comprising the **polypeptide**;
(5) an **antibody** having specific binding affinity for the **polypeptide**;
(6) a method for detecting the presence or absence of **L. intracellularis** in a biological sample;
(7) a method of preventing infection by **L. intracellularis** in an animal;
(8) a composition comprising a first oligonucleotide primer and a second oligonucleotide primer, where the first and second primers are each 10 to 50 nucleotides in length, and where in the presence of **L. intracellularis** nucleic acid, generate an amplification product under standard amplification conditions, but do not generate an amplification product in the presence of nucleic acid from tar organism other than **L. intracellularis**; and
(9) an article of manufacture comprising the composition.

ACTIVITY - Antibacterial. No biological data given.
MECHANISM OF ACTION - Immunotherapy.
USE - The nucleic acid and **polypeptides** are useful for treating and preventing **L. intracellularis** infection (claimed).
Dwg.0/3

L4 ANSWER 2 OF 21 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2003-268316 [26] WPIDS
DOC. NO. CPI: C2003-070160
TITLE: Composition for separating target cells from mixture of cells, has a linker having one end coupled to intracellular marker that binds to molecules in target cells, and the other end coupled to extracellular component.

DERWENT CLASS: B04 D16
INVENTOR(S): PHI-WILSON, J T
PATENT ASSIGNEE(S): (PHIW-I) PHI-WILSON J T; (GUAV-N) GUAVA TECHNOLOGIES INC
COUNTRY COUNT: 101
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2003016488	A2	20030227	(200326)*	EN	11
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW					
US 2003049836	A1	20030313	(200326)		
AU 2002326680	A1	20030303	(200452)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003016488	A2	WO 2002-US26188	20020815
US 2003049836	A1 Provisional	US 2001-312482P	20010815
		US 2002-219852	20020814
AU 2002326680	A1	AU 2002-326680	20020815

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002326680	A1 Based on	WO 2003016488

PRIORITY APPLN. INFO: US 2002-219852 20020814; US 2001-312482P 20010815

AN 2003-268316 [26] WPIDS

AB WO2003016488 A UPAB: 20030428

NOVELTY - Composition (I) for separating target cells (TC) from mixture of cells, comprises linker (**L**), **intracellular** marker for binding to intracellular molecule (IM) of TC coupled to one end of (L), and extracellular component (EC) coupled to other end of (L), where (L) permits the marker to penetrate cell membrane (CM) and bind to IM to keep one end portion of (L) in cell and other end portion and EC outside CM.

DETAILED DESCRIPTION - A composition (I) for separating target cells (100) from a mixture of cells, comprises a linker (104), an extracellular component (106) coupled to the first end (108) of the linker, and an intracellular marker (112) for binding to an intracellular molecule of target cells coupled to the second end (110) of the linker, where the linker permits the marker to penetrate the cell membrane (102) and bind to the intracellular molecule to keep the one end portion of the linker in the cell and the other end portion and the extracellular component outside the cell membrane.

USE - (I) is useful for separating target molecules from a mixed population of cells, by contacting the cell population with (I) that includes intracellular markers, linkers and extracellular components with

the markers attached to one end of linker and the extracellular components attached to the other end of the linker, where the intracellular markers permeate through the cell membrane and bind to the intracellular molecule of target cells while the extracellular components remain outside the cell, and separating the target cells on the basis of the extracellular component (claimed). (I) is useful for isolating human stem cells from umbilical cord blood, bone marrow, peripheral blood or fetal liver.

DESCRIPTION OF DRAWING(S) - The figure shows a schematic diagram of a cell separation system.

Target cells; 100

Cell membrane; 102

Linker; 104

Extracellular component; 106

First end of the linker; 108

Second end of the linker; 110

Intracellular marker 112

Dwg.1/1

L4 ANSWER 3 OF 21 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2003-900619 [82] WPIDS

CROSS REFERENCE: 2003-416977 [39]; 2003-895290 [82]

DOC. NO. CPI: C2003-256050

TITLE: New isolated **Lawsonia intracellularis** polynucleotide and **polypeptide**, useful for the prevention and diagnosis of Lawsonia infections in susceptible animals, such as pigs.

DERWENT CLASS: B04 C06 D16

INVENTOR(S): ROSEY, E L

PATENT ASSIGNEE(S): (ROSE-I) ROSEY E L

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2003202983	A1	20031030	(200382)*		66

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
US 2003202983	A1	Provisional	US 1999-160922P	19991022
		Provisional	US 1999-163858P	19991105
		Div ex	US 2000-689065	20001012
			US 2003-449462	20030529

FILING DETAILS:

PATENT NO	KIND		PATENT NO
US 2003202983	A1	Div ex	US 6605696

PRIORITY APPLN. INFO: US 2003-449462 20030529; US 1999-160922P 19991022; US 1999-163858P 19991105; US 2000-689065 20001012

AN 2003-900619 [82] WPIDS

CR 2003-416977 [39]; 2003-895290 [82]

AB US2003202983 A UPAB: 20031223

NOVELTY - A new isolated polynucleotide molecule (I) comprises:

(a) a sequence encoding **Lawsonia intracellularis** HtrA, PonA, HypC, LysS, YcfW, ABC1 or Omp100 **protein**;

(b) a sequence that is a substantial part of the encoding sequence of (a); or

(c) a sequence homologous to the sequences of (a) or (b).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a polynucleotide molecule comprising a nucleotide sequence greater than 20 nucleotides having promoter activity and found within a fully defined sequence of 5445 bp, given in the specification, from nucleotide 2691-2890, or its complement;

(2) a recombinant vector comprising (I);

(3) a transformed host cell comprising the vector of (2);

(4) a **polypeptide** produced by the transformed host cell of (3);

(5) a genetic construct comprising a polynucleotide molecule that can be used to alter a Lawsonia gene, comprising:

(a) polynucleotide molecule comprising a sequence that is otherwise the same as a nucleotide sequence of a htrA, ponA, hypC, lysS, ycfW, abc1 or omp100 gene, or its homolog, substantial portion, or mutations capable of altering the above mentioned genes; or

(b) a polynucleotide molecule comprising a sequence that naturally flanks in situ the ORF of the htrA, ponA, hypC, lysS, ycfW, abc1 or omp100 gene, or its homolog, such that transformation of a Lawsonia cell with the genetic construct results in altering htrA, ponA, hypC, lysS, ycfW, abc1 or omp100 gene;

(6) a transformed host cell comprising the genetic construct of (5);

(7) an isolated **polypeptide** comprising:

(a) a **Lawsonia intracellularis** HtrA, PonA, HypC, LysS, YcfW, ABC1 or Omp100 **protein**;

(b) homologs or substantial portions of (a);

(c) a fusion **protein** of the **polypeptide** in (a) or (b) fused to another **protein** or **polypeptide**; or

(d) an analog or derivative of the **polypeptide** in (a), (b) or (c);

(8) a substantially pure **polypeptide** comprising an epitope of HtrA, PonA, HypC, LysS, YcfW, ABC1 or Omp100 **protein** that is specifically reactive with anti-Lawsonia **antibodies**;

(9) an isolated **polypeptide** comprising the sequence encoded by (I);

(10) an isolated **antibody** that specifically reacts with **L. intracellularis** HtrA, PonA, HypC, LysS, YcfW, ABC1 or Omp100 **protein**;

(11) a live attenuated vaccine comprising the transformed cell of (6);

(12) a killed cell vaccine comprising transformed cells of (6) in killed form; and

(13) an immunogenic composition comprising (I) or the **polypeptide** of (7), in combination with a carrier.

ACTIVITY - Antibacterial. No biological data given.

MECHANISM OF ACTION - Vaccine.

USE - The methods and compositions of the present invention are useful for the prevention and diagnosis of **L.**

intracellularis infections in susceptible animals, such as pigs.
Dwg.0/9

L4 ANSWER 4 OF 21 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2003-416977 [39] WPIDS
CROSS REFERENCE: 2003-895290 [82]; 2003-900619 [82]
DOC. NO. CPI: C2003-110367
TITLE: New isolated **Lawsonia intracellularis** polynucleotide and **polypeptide**, useful for the prevention and diagnosis of Lawsonia infections in susceptible animals, such as pigs.
DERWENT CLASS: B04 C06 D16
INVENTOR(S): ROSEY, E L
PATENT ASSIGNEE(S): (ROSE-I) ROSEY E L
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2003021802	A1	20030130	(200339)*		64

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
US 2003021802	A1	Provisional	US 1999-160922P	19991022
		Provisional	US 1999-163858P	19991105
		Cont of	US 2000-689065	20001012
			US 2002-210296	20020801

PRIORITY APPLN. INFO: US 2002-210296 20020801; US 1999-160922P 19991022; US 1999-163858P 19991105; US 2000-689065 20001012
AN 2003-416977 [39] WPIDS
CR 2003-895290 [82]; 2003-900619 [82]
AB US2003021802 A UPAB: 20031223
NOVELTY - A new isolated polynucleotide molecule (I) comprises:
(a) a sequence encoding **Lawsonia intracellularis** HtrA, PonA, HypC, LysS, YcfW, ABC1 or Omp100 **protein**;
(b) a sequence that is a substantial part of the encoding sequence of (a); or
(c) a sequence homologous to the sequences of (a) or (b).
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) a polynucleotide molecule comprising a nucleotide sequence greater than 20 nucleotides having promoter activity and found within a fully defined sequence of 5445 bp, given in the specification, from nucleotide 2691-2890, or its complement;
(2) a recombinant vector comprising (I);
(3) a transformed host cell comprising the vector of (2);
(4) a **polypeptide** produced by the transformed host cell of (3);
(5) a genetic construct comprising a polynucleotide molecule that can be used to alter a Lawsonia gene, comprising: (a) polynucleotide molecule

comprising a sequence that is otherwise the same as a nucleotide sequence of a htrA, ponA, hypC, lysS, ycfW, abc1 or omp100 gene, or its homolog, substantial portion, or mutations capable of altering the above mentioned genes; or (b) a polynucleotide molecule comprising a sequence that naturally flanks in situ the ORF of the htrA, ponA, hypC, lysS, ycfW, abc1 or omp100 gene, or its homolog;

(6) a transformed host cell comprising the genetic construct of (5);

(7) an isolated **polypeptide** comprising: (a) a **Lawsonia intracellularis** HtrA, PonA, HypC, LysS, YcfW, ABC1 or Omp100 **protein**; (b) homologs or substantial portions of (a); (c) a fusion **protein** of the **polypeptide** in (a) or (b) fused to another **protein** or **polypeptide**; or (d) an analog or derivative of the **polypeptide** in (a), (b) or (c);

(8) a substantially pure **polypeptide** comprising an epitope of HtrA, PonA, HypC, LysS, YcfW, ABC1 or Omp100 **protein** that is specifically reactive with anti-Lawsonia **antibodies**;

(9) an isolated **polypeptide** comprising the sequence encoded by (I);

(10) an isolated **antibody** that specifically reacts with **L. intracellularis** HtrA, PonA, HypC, LysS, YcfW, ABC1 or Omp100 **protein**;

(11) a live attenuated vaccine comprising the transformed cell of (6);

(12) a killed cell vaccine comprising transformed cells of (6) in killed form; and

(13) an immunogenic composition comprising (I) or the **polypeptide** of (7), in combination with a carrier.

ACTIVITY - Antibacterial. No biological data given.

MECHANISM OF ACTION - Vaccine.

USE - The methods and compositions of the present invention are useful for the prevention and diagnosis of **L. intracellularis** infections in susceptible animals, such as pigs.

Dwg.0/9

L4 ANSWER 5 OF 21 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2003-895290 [82] WPIDS

CROSS REFERENCE: 2001-592540 [67]; 2003-416977 [39]; 2003-900619 [82]

DOC. NO. CPI: C2003-254294

TITLE: New **Lawsonia intracellularis** **polypeptides**, useful as vaccines, as diagnostic agents, or in preventing infections in susceptible animals such as pigs, e.g. porcine proliferative enteropathy.

DERWENT CLASS: B04 C06 D16

INVENTOR(S): ROSEY, E L

PATENT ASSIGNEE(S): (PFIZ) PFIZER INC; (PFIZ) PFIZER PROD INC

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 6605696	B1	20030812	(200382)*		62

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

US 6605696	B1 Provisional	US 1999-160922P	19991022
	Provisional	US 1999-163868P	19991105
		US 2000-689065	20001012

PRIORITY APPLN. INFO: US 2000-689065 20001012; US 1999-160922P 19991022; US 1999-163868P 19991105

AN 2003-895290 [82] WPIDS

CR 2001-592540 [67]; 2003-416977 [39]; 2003-900619 [82]

AB US 6605696 B UPAB: 20031223

NOVELTY - An isolated **polypeptide** derived from **Lawsonia intracellularis**, is new.

DETAILED DESCRIPTION - The **polypeptide** comprises: (A) a fully defined sequence of 896 amino acids (P1) given in the specification, which encodes **L. intracellularis** Omp100 **protein**; (B) an amino acid sequence for **L. intracellularis** Omp100 **protein** corresponding to the sequence of P1; (C) **L. intracellularis** Omp100 **protein** corresponding to the sequence of P1, and a fusion **polypeptide** encoding the **L. intracellularis** Omp100 **protein** fused to another **protein** or **polypeptide**; or (D) an epitope of the Omp100 **protein** that is specifically reactive with anti-Lawsonia **antibodies**. An INDEPENDENT CLAIM is included for an immunogenic composition comprising the **polypeptide** cited above and a pharmaceutical carrier.

ACTIVITY - Antibacterial. No biological data given.

MECHANISM OF ACTION - Vaccine.

USE - The **proteins**, polynucleotides and immunogenic compositions are useful as vaccines, as diagnostic agents, or in preventing **L. intracellularis** infections in susceptible animals such as pigs, e.g. porcine proliferative enteropathy.

Dwg.0/9

L4 ANSWER 6 OF 21 MEDLINE on STN DUPLICATE 1

ACCESSION NUMBER:	2003473292 MEDLINE
DOCUMENT NUMBER:	PubMed ID: 14535543
TITLE:	Preparation and characterization of polyclonal and monoclonal **antibodies** against **Lawsonia intracellularis**.
AUTHOR:	Guedes Roberto M C; Gebhart Connie J
CORPORATE SOURCE:	Department of Veterinary Pathobiology, University of Minnesota, Saint Paul, MN 55108, USA.
SOURCE:	Journal of veterinary diagnostic investigation : official publication of the American Association of Veterinary Laboratory Diagnosticians, Inc, (2003 Sep) 15 (5) 438-46. Journal code: 9011490. ISSN: 1040-6387.
PUB. COUNTRY:	United States
DOCUMENT TYPE:	Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:	English
FILE SEGMENT:	Priority Journals
ENTRY MONTH:	200312
ENTRY DATE:	Entered STN: 20031011 Last Updated on STN: 20031219 Entered Medline: 20031204

Searcher : Shears 571-272-2528

AB Proliferative enteropathy is an intestinal infectious disease caused by the obligate intracellular bacterium **Lawsonia intracellularis**. Immunohistochemistry staining has superior sensitivity over hematoxylin and eosin and silver staining for detecting **L. intracellularis** in histological sections. A **L. intracellularis**-specific monoclonal **antibody** (MAb) produced in the UK (IG4 MAb) has been described in the literature. However, no monoclonal or polyclonal **antibodies** are commercially available. Therefore, the objective of this study was to produce and characterize new polyclonal and monoclonal **antibodies** against **L. intracellularis** that are suitable for diagnostic use. The new monoclonal (2001 MAb) and polyclonal **antibodies** (1999 PAb) were compared with the IG4 MAb using Western blot analysis of outer membrane **proteins** (OMPs) of 6 **L. intracellularis** isolates, Bilophila wadsworthia and Brachyspira hyodysenteriae and using immunohistochemistry of known positive and negative histologic samples and pure cultures of **L. intracellularis**, B. wadsworthia, B. hyodysenteriae, Salmonella choleraesuis, S. typhimurium, and Escherichia coli K88. Immunogold staining using 2001 MAb was performed to show the specificity of the **antibody** against an **L. intracellularis** surface **protein**. Western blot analysis showed that the 2001 MAb targeted an OMP of 77 kD, which made it different from the IG4 MAb that targeted an 18-kD OMP. The immunogold stain demonstrated the specificity of the 2001 MAb to a surface **protein** of **L. intracellularis** . The polyclonal **antibody** (1999 PAb) targeted 5 OMPs (77, 69, 54, 42, and 36 kD). Both the 2001 MAb and 1999 PAb stained known positive, but not negative, histologic samples. Both the 2001 MAb and 1999 PAb reacted with a pure culture of **L. intracellularis** but not with any other common enteric pathogens. These two new **antibodies** will be useful for immunodiagnosis of **L. intracellularis**.

L4 ANSWER 7 OF 21 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2002-557448 [59] WPIDS
DOC. NO. NON-CPI: N2002-441304
DOC. NO. CPI: C2002-158153
TITLE: New immunogenic **polypeptide** comprising epitope of Lawsonia spp. **polypeptide** such as fihB, fliR, ntrC, glnH, motA, **polypeptides**, useful in vaccines for treatment of porcine proliferative enteropathy in pigs and birds.
DERWENT CLASS: B04 C06 D16 S03
INVENTOR(S): GOOD, R T; KING, K W; LEEROSEY, E; STRUGNELL, R A; ROSEY, E L
PATENT ASSIGNEE(S): (AGRI-N) AGRIC VICTORIA SERVICES PTY LTD; (AUPO-N) AUSTRALIAN PORK LTD; (PFIZ) PFIZER PROD INC; (GOOD-I) GOOD R T; (KING-I) KING K W; (ROSE-I) ROSEY E L; (STRU-I) STRUGNELL R A
COUNTRY COUNT: 99
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002038594	A1	20020516	(200259)*	EN	155

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ

NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT
RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2002014810 A 20020521 (200260)
US 2003103999 A1 20030605 (200339)
EP 1332154 A1 20030806 (200353) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
RO SE SI TR
BR 2001014835 A 20030701 (200356)
JP 2004512851 W 20040430 (200430) 374

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002038594	A1	WO 2001-AU1462	20011109
AU 2002014810	A	AU 2002-14810	20011109
US 2003103999	A1 Provisional	US 2000-249595P	20001117
		US 2001-10160	20011109
EP 1332154	A1	EP 2001-983297	20011109
		WO 2001-AU1462	20011109
BR 2001014835	A	BR 2001-14835	20011109
		WO 2001-AU1462	20011109
JP 2004512851	W	WO 2001-AU1462	20011109
		JP 2002-541925	20011109

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2002014810	A	Based on	WO 2002038594
EP 1332154	A1	Based on	WO 2002038594
BR 2001014835	A	Based on	WO 2002038594
JP 2004512851	W	Based on	WO 2002038594

PRIORITY APPLN. INFO: US 2000-249596P 20001117; AU 2000-1381 20001110

AN 2002-557448 [59] WPIDS

AB WO 200238594 A UPAB: 20020916

NOVELTY - An isolated or recombinant immunogenic **polypeptide** (I) which comprises, mimics or cross-reacts with a B-cell or T-cell epitope of a Lawsonia spp. **polypeptide** such as fihB, fliR, ntrC, glnH, motA, motB, tlyC, ytfM or ytfN **polypeptides**, is new.

DETAILED DESCRIPTION - An isolated or recombinant immunogenic **polypeptide** (I) which comprises, mimics or cross-reacts with a B-cell or T-cell epitope of a Lawsonia spp. **polypeptide** such as fihB, fliR, ntrC, glnH, motA, motB, tlyC, ytfM or ytfN **polypeptides**, is:

(i) a **polypeptide** of Lawsonia spp. which comprises an amino acid sequence that has at least about 60% sequence identity overall to a fully defined amino acid (PS) sequence of 207 (S2), 262 (S4), 456 (S6), 137 (S8), 282 (S10), 237 (S12), 348 (S14), 602 (S16), or 1382 (S18) amino acids as given in specification;

(ii) a **polypeptide** of Lawsonia spp. which comprises an

amino acid sequence which has at least 60% sequence identity overall to an amino acid sequence encoded by **L. intracellularis** (Li) DNA contained within a plasmid (P) having AGAL Accession Nos: NM00/16476 (plasmid pGTE1 glnH); NM00/16477 (plasmid pGTE2 flhB); NM00/16478 (plasmid pGTE3 fliR); NM00/16479 (plasmid pGTE4 motA/B); NM00/16480 (plasmid pGTE5 tlyC); NM00/16481 (plasmid pGTE6 ntrC); NM00/16482 (plasmid pGTE7 ytfM); or NM01/23286 (plasmid pGTE8 ytfN);

(iii) a **polypeptide** which comprises at least about 5 contiguous amino acids of PS;

(iv) a **polypeptide** which comprises at least about 5 contiguous amino acids of amino acid sequence of Li DNA contained within (P);

(v) a **polypeptide** which comprises an amino acid sequence encoded by nucleotide sequence of Lawsonia spp. having at least 60% identity overall to a fully defined nucleotide sequence (NS) of 622 (S1), 789 (S3), 1371 (S5), 412 (S7), 849 (S9), 717 (S11), 1047 (S13), 1812 (S15), or 4149 (S17) nucleotides as given in specification;

(vi) a **polypeptide** which comprises an amino acid sequence encoded by a nucleotide sequence of Lawsonia spp. having at least 60% sequence identity overall to nucleotide sequence of Li DNA contained with an (P);

(vii) a **polypeptide** encoded by at least 15 contiguous nucleotides of NS;

(viii) a **polypeptide** encoded by at least 15 contiguous nucleotides of nucleotide sequence of Li DNA contained within (P); or

(ix) a homolog, analog or derivative of above mentioned **polypeptides** which mimic a B-cell or T-cell epitope of Lawsonia spp.

INDEPENDENT CLAIMS are also included for the following:

(1) a vaccine composition (II) for the prophylaxis or treatment of infection of an animal by Lawsonia spp. which comprises an immunogenic component that comprises (I) and one or more carriers, diluents or adjuvants suitable for veterinary or pharmaceutical use;

(2) a combination vaccine composition (III) for the prophylaxis or treatment of infection of an animal by Lawsonia spp., comprising:

(i) a first immunogenic component which comprises (I); and

(ii) a second immunogenic component different from first immunogenic component and comprising a Li **polypeptide** such as FlgE, hemolysin, OmpH, SodC, flhB, fliR, ntrC, glnH, motA, motB, tlyC, ytfM, or ytfN **polypeptides** and one or more carriers, diluents or adjuvants suitable for veterinary or pharmaceutical use;

(3) a vaccine vector (IV) that comprises, in an expressible form, an isolated nucleic acid molecule (V) comprising a nucleotide sequence such as:

(i) a **protein**-encoding nucleotide sequence having at least 60% sequence identity overall to a sequence of NS;

(ii) a **protein**-encoding nucleotide sequence having at least 60% identity overall to the **protein**-encoding sequence of Li DNA contained within (P);

(iii) a **protein**-encoding nucleotide sequence which comprises at least about 15 contiguous nucleotides of NS;

(iv) a **protein**-encoding nucleotide sequence which comprises at least 15 contiguous nucleotides of Li DNA contained within (P);

(v) a **protein**-encoding nucleotide sequence which hybridizes under low stringency condition to the complement of NS;

(vi) a **protein**-encoding nucleotide sequence which

hybridizes under low stringency conditions to non-coding strand of Li DNA contained within (P); and

(vii) a homolog, analog or derivative of above mentioned nucleotide sequences which encodes the **polypeptide** that mimics a B-cell or T-cell epitope of Lawsonia spp.;

(4) an isolated polyclonal or monoclonal **antibody** molecule (VI) that binds specifically to Lawsonia spp. **polypeptide** of flhB, fliR, ntrC, glnH, motA, motB, tlyC, ytfM, or ytfN **polypeptide**, or homolog, analog or derivative of the above mentioned **polypeptide**;

(5) an isolated nucleic acid molecule (N) which consists of a nucleotide sequence encoding Lawsonia spp. such as flhB, fliR, ntrC, glnH, motA, motB, tlyC, ytfM, or ytfN;

(6) a probe or primer comprising any one of fully defined 50 oligonucleotide sequences as given in specification such as catattcaaggtacagcatctgatgg, ctcctttacaaaccttgctcc, gctcatctaaagaacactttcc, caaggtagtatacaacttattgg, etc., or complementary nucleotide sequence to the oligonucleotide sequence;

(7) a plasmid having AGAL Accession Nos: NM00/16476 (plasmid pGTE1 glnH); NM00/16477 (plasmid pGTE2 flhB); NM00/16478 (plasmid pGTE3 fliR); NM00/16479 (plasmid pGTE4 motA/B); NM00/16480 (plasmid pGTE5 tlyC); NM00/16481 (plasmid pGTE6 ntrC); NM00/16482 (plasmid pGTE7 ytfM); or NM01/23286 (plasmid pGTE8 ytfN);

(8) a recombinant vector (VII) capable of replication in a host cell, where the vector comprises (N);

(9) a host cell (VIII) comprising (VII);

(10) identifying (M1) whether or not a porcine or avian animal has suffered from a past infection, or is currently infected, with Li or a microorganism that is immunologically cross-reactive with Li;

(11) diagnosing (M2) infection of a porcine or avian animal by Li or a microorganism that is immunologically cross-reactive with Li; and

(12) detecting (M3) Li or related microorganism in a biological sample derived from a porcine or avian animal subject.

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - Vaccine. No supporting data is given.

USE - (I) is useful for identifying whether or not a porcine or avian animal has suffered from a past infection, or is currently infected, with Li or a microorganism that is immunologically cross-reactive with Li. (VI) is useful for diagnosing infection of a porcine or avian animal by Li or a microorganism that is immunologically cross-reactive with Li. (N) is useful as probes or primers for detecting Li or related microorganism in a biological sample derived from a porcine or avian animal subject (all claimed). (I) is preferably useful for vaccinating porcine animals against porcine proliferative enteropathy (PPE). (I) is also useful in vaccines for the prophylaxis and treatment of PPE in birds. (II) is useful for conferring protection against infection by other species of the genus Lawsonia or other microorganisms related to Li.

Dwg.0/1

L4 ANSWER 8 OF 21 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2002-521947 [56] WPIDS
DOC. NO. NON-CPI: N2002-413067
DOC. NO. CPI: C2002-147814
TITLE: New **Lawsonia intracellularis proteins**, useful as a vaccine or for manufacturing a vaccine for combating **L.**

intracellularis infections, e.g. porcine proliferative enteropathy, which is an important disease in the pig industry.

DERWENT CLASS: B04 C04 D16 S03
INVENTOR(S): JACOBS, A A C; VERMEIJ, P
PATENT ASSIGNEE(S): (ALKU) AKZO NOBEL NV
COUNTRY COUNT: 30
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 1219711	A2	20020703	(200256)*	EN	26
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
AU 2001097371	A	20020627	(200256)		
CA 2365494	A1	20020620	(200256)	EN	
JP 2003000276	A	20030107	(200314)		71
HU 2001005379	A2	20030128	(200323)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1219711	A2	EP 2001-204919	20011214
AU 2001097371	A	AU 2001-97371	20011220
CA 2365494	A1	CA 2001-2365494	20011218
JP 2003000276	A	JP 2001-385373	20011219
HU 2001005379	A2	HU 2001-5379	20011219

PRIORITY APPLN. INFO: EP 2000-204660 20001220
AN 2002-521947 [56] WPIDS
AB EP 1219711 A UPAB: 20020903
NOVELTY - **Lawsonia intracellularis proteins**
(I) comprising a fully defined sequence at least 70% homologous to the sequence comprising 218 amino acids (P1) or 475 amino acids (P2) given in the specification, or their immunogenic fragments, are new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) nucleic acid sequences encoding the **L. intracellularis proteins** (or a part of the nucleic acid sequence that encodes an immunogenic fragment of the **proteins**) comprising a sequence with at least 70% homology with the nucleic acid sequence having 656 bp (NA1) or 1428 bp (NA2) fully defined in the specification;

(2) deoxyribonucleic acid (DNA) fragment comprising the nucleic acid;

(3) a recombinant DNA molecule comprising the nucleic acid sequences above, or the DNA fragment, under the control of a functionally linked promoter;

(4) a live recombinant carrier comprising the DNA fragment or the recombinant DNA molecule;

(5) a host cell comprising the NA1 or NA2 nucleic acid sequences, the DNA fragment, the recombinant DNA molecule or the live recombinant carrier;

L. intracellularis Outer Membrane **Protein**, which has a molecular weight of 19.21 kD, or its immunogenic fragment, obtainable by a process comprising:

(a) subjecting an outer membrane preparation to sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS-PAGE); and

(b) excision of the 19 or 21 kD band from the gel;

(6) a vaccine for combating **L. intracellularis** infections comprising the NA1 or NA2 nucleic acid sequences, the DNA fragment, the recombinant DNA molecule, the live recombinant carrier, the host cell, or the P1 or P2 **L. intracellularis proteins**; and a pharmaceutical carrier;

(7) preparing the vaccine by admixing the NA1 or NA2 nucleic acid sequences, the DNA fragment, the recombinant DNA molecule, the live recombinant carrier, the host cell, or the P1 or P2 **L. intracellularis proteins**; and a pharmaceutical carrier; and

(8) a diagnostic test for detecting a **L. intracellularis** DNA comprising the NA1 or NA2 nucleic acid sequences, or a fragment of these sequences with a length of at least 12, preferably 18, nucleotides.

ACTIVITY - Antibiotic.

No suitable data given.

MECHANISM OF ACTION - Vaccine.

USE - (I) are useful as a vaccine or for manufacturing a vaccine for combating **L. intracellularis** infections (claimed), e.g. porcine proliferative enteropathy, which an important disease in the pig industry. (I) is also useful for diagnosing **L. intracellularis** infection and for detecting **L. intracellularis** DNA, **L. intracellularis** antigens or **antibodies** against **L. intracellularis**.

Dwg.0/2

L4 ANSWER 9 OF 21 MEDLINE on STN DUPLICATE 2

ACCESSION NUMBER: 2002284767 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12010978
TITLE: LsaA, an antigen involved in cell attachment and invasion, is expressed by **Lawsonia intracellularis** during infection in vitro and in vivo.
AUTHOR: McCluskey Jackie; Hannigan Joanne; Harris Jennifer D; Wren Brendan; Smith David G E
CORPORATE SOURCE: Zoonotic & Animal Pathogens Research Laboratory, Department of Medical Microbiology, Easter Bush Veterinary Centre, University of Edinburgh, Edinburgh, United Kingdom.
SOURCE: Infection and immunity, (2002 Jun) 70 (6) 2899-907. Journal code: 0246127. ISSN: 0019-9567.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-AF498259
ENTRY MONTH: 200206
ENTRY DATE: Entered STN: 20020528
Last Updated on STN: 20020627
Entered Medline: 20020626

AB **Lawsonia intracellularis** has been identified recently as the etiological agent of proliferative enteropathies, which are characterized by intestinal epithelial hyperplasia and associated moderate immune responses. This disease complex has been reported in a broad range

of animals, prevalently in pigs, and **L. intracellularis** has been linked with ulcerative colitis in humans. **L. intracellularis** is an obligate intracellular bacterium, and the pathogenic mechanisms used to cause disease are unknown. Using in vitro-grown organisms as a source of genomic DNA, we identified a Lawsonia gene which encodes a surface antigen, LsaA (for Lawsonia surface antigen), associated with attachment to and entry into cells. The deduced amino acid sequence of this **protein** showed some similarity to members of a novel **protein** family identified in a number of other bacterial pathogens but for which roles are not fully defined. Transcription of this gene was detected by reverse transcription-PCR in **L. intracellularis** grown in vitro in IEC18 cells and in bacteria present in ileal tissue from infected animals. Immunohistochemistry with specific monoclonal **antibody** and immunoblotting with sera from infected animals demonstrated that LsaA **protein** is synthesized by **L. intracellularis** during infection. Expression of this gene during infection in vitro and in vivo suggests that this surface antigen is involved during infection, and phenotypic analysis indicated a role during **L. intracellularis** attachment to and entry into intestinal epithelial cells

L4 ANSWER 10 OF 21 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

ACCESSION NUMBER: 2002:176391 BIOSIS
DOCUMENT NUMBER: PREV200200176391
TITLE: Analysis of gene expression in the obligately intracellular bacterial pathogen **Lawsonia intracellularis.**
AUTHOR(S): McCluskey, J. [Reprint author]; Harris, J. [Reprint author]; Smith, D. G. E. [Reprint author]
CORPORATE SOURCE: University of Edinburgh, Edinburgh, UK
SOURCE: Abstracts of the General Meeting of the American Society for Microbiology, (2001) Vol. 101, pp. 66. print. Meeting Info.: 101st General Meeting of the American Society for Microbiology. Orlando, FL, USA. May 20-24, 2001. American Society for Microbiology. ISSN: 1060-2011.
DOCUMENT TYPE: Conference; (Meeting) Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 6 Mar 2002 Last Updated on STN: 6 Mar 2002

AB **Lawsonia intracellularis** is an obligately intracellular pathogen which is the cause of the disease complex known as proliferative enteropathy (PE) or ileitis. **L. intracellularis** is pathogenic in a broad range of animal hosts, disease being most notable in pigs. **L. intracellularis** has a tropism for immature (crypt) epithelial cells and disease is characterised by epithelial hyperplasia in infected crypts. This pathology presumably reflects expression of novel virulence factors during infection. Because methods for genetic manipulation of intracellular bacteria are rudimentary examination of their gene expression requires application of alternative sensitive techniques which generally have involved examination of RNA. Detection of mRNA by RT-PCR (reverse transcription-PCR) is one method which we have used (alongside others) to

assess expression of lhyA, a **L. intracellularis** gene which is a representative of a novel family of bacterial haemolysins. lhyA is expressed both in vitro in epithelial cells and in vivo in intestinal mucosa from infected animals. Furthermore, in addition to detection of specific RNA transcripts, **antibody** responses to recombinant LhyA were detected in sera from experimentally-infected animals, confirming **protein** expression during infection. The promoter region upstream from lhyA does not possess typical sigma factor consensus binding sites thus regulation of gene expression in this bacterium appears to differ from others. Fusion of the lhyA promoter region to a dual GFP-CAT reporter plasmid is being applied to examine expression of this gene during infection in vitro and in vivo. Reporter plasmids are being further applied in a promoter trap system generically referred to as "in vivo expression technology" (IVET) to identify genes expressed by **L. intracellularis** during infection through construction of random libraries. Through combination of RNA-based techniques, reporter systems and other analyses of gene expression we have initiated analysis of gene function in this obligately intracellular bacterium.

L4 ANSWER 11 OF 21 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2001-016212 [02] WPIDS
DOC. NO. CPI: C2001-004517
TITLE: New immunogenic Lawsonia hemolysin **peptide**, nucleic acid and **antibody**, useful in vaccines and for the diagnosis of Lawsonia infections, especially in swine.
DERWENT CLASS: B04 D16
INVENTOR(S): ANKENBAUER, R G; HASSE, D; PANACCIO, M; ROSEY, E L
PATENT ASSIGNEE(S): (AGRI-N) AGRIC VICTORIA SERVICES PTY LTD; (PFIZ) PFIZER PROD INC; (PIGR-N) PIG RES & DEV CORP; (AUPO-N) AUSTRALIAN PORK LTD
COUNTRY COUNT: 93
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000069906	A1	20001123	(200102)*	EN	95
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2000043861	A	20001205	(200113)		
EP 1177213	A1	20020206	(200218)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
NZ 515363	A	20030725	(200357)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000069906	A1	WO 2000-AU439	20000511
AU 2000043861	A	AU 2000-43861	20000511
EP 1177213	A1	EP 2000-924978	20000511

		WO 2000-AU439	20000511
NZ 515363	A	NZ 2000-515363	20000511
		WO 2000-AU439	20000511

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000043861	A	Based on	WO 2000069906
EP 1177213	A1	Based on	WO 2000069906
NZ 515363	A	Based on	WO 2000069906

PRIORITY APPLN. INFO: US 1999-134022P 19990513
AN 2001-016212 [02] WPIDS
AB WO 200069906 A UPAB: 20010110
NOVELTY - Isolated or recombinant **polypeptide** (I) that comprises, mimics or cross-reacts with a B- or T-cell epitope of a hemolysin **polypeptide** from a Lawsonia spp.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a vaccine comprising, at least one carrier, diluent or adjuvant and a (I) having at least 70% sequence identity with a fully defined 251 aa sequence (1), (given in the specification), or at least 50% identity overall with aa 1-50 of (1), or their immunogenic homolog, analog or derivative that is immunologically cross-reactive with **L. intracellularis**;

(2) vaccine vector comprising a nucleic acid sequence (II) that encodes (1);

(3) poly- or monoclonal **antibody** (Ab) that binds to Lawsonia hemolysin **polypeptide**, or its derivatives, that have at least 70% sequence identity with (1);

(4) an isolated nucleic acid (III) that encodes a **peptide**, oligopeptide or **polypeptide** having at least 70% sequence identity with (1), at least 50% identity overall with aa 1-50 of (1), or its homolog, analog or derivative that mimics a B- or T-cell epitope, also complements of (III);

(5) a probe or primer containing at least 15 contiguous nucleotides from a 756 bp sequence (2), reproduced, or its complement; and

(6) the plasmid pALK12 (ATCC 207195).

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - Induction of a specific humoral immune response.

USE - (I) are used (i) as antigens in vaccines to prevent or treat infection by Lawsonia, in birds and animals, especially pigs, to raise specific **antibodies** (Ab) and to detect past or present infection. Ab are also useful in diagnosis, to detect **L. intracellularis** or immunologically cross-reactive species, also for identification of epitopes in hemolysin. Vectors that contain nucleic acid (II) that encodes (I) are also useful in genetic vaccines, and fragments of (II) are useful as primers or probes for detecting **L. intracellularis** or related microorganisms, in hybridization or amplification assays.

Dwg.0/1

L4 ANSWER 12 OF 21 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2001-016211 [02] WPIDS

DOC. NO. CPI: C2001-004516
TITLE: New isolated Lawsonia spp. OmpH **polypeptides** and nucleic acids, useful for the prophylaxis, treatment and detection of Lawsonia infections.
DERWENT CLASS: B04 D16
INVENTOR(S): HASSE, D; PANACCIO, M; SINISTAJ, M
PATENT ASSIGNEE(S): (AGRI-N) AGRIC VICTORIA SERVICES PTY LTD; (PIGR-N) PIG RES & DEV CORP; (AUPO-N) AUSTRALIAN PORK LTD
COUNTRY COUNT: 93
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000069905	A1	20001123	(200102)*	EN	84
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2000043860	A	20001205	(200113)		
EP 1183268	A1	20020306	(200224)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
BR 2000011290	A	20020521	(200238)		
NZ 515330	A	20030429	(200334)		
JP 2003521881	W	20030722	(200350)		89
AU 767390	B	20031106	(200401)		
AU 2004200487	A1	20040304	(200447)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000069905	A1	WO 2000-AU438	20000511
AU 2000043860	A	AU 2000-43860	20000511
EP 1183268	A1	EP 2000-924977	20000511
		WO 2000-AU438	20000511
BR 2000011290	A	BR 2000-11290	20000511
		WO 2000-AU438	20000511
NZ 515330	A	NZ 2000-515330	20000511
		WO 2000-AU438	20000511
JP 2003521881	W	JP 2000-618321	20000511
		WO 2000-AU438	20000511
AU 767390	B	AU 2000-43860	20000511
AU 2004200487	A1	AU 2004-200487	20040205

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000043860	A	Based on	WO 2000069905
EP 1183268	A1	Based on	WO 2000069905
BR 2000011290	A	Based on	WO 2000069905
NZ 515330	A	Based on	WO 2000069905
JP 2003521881	W	Based on	WO 2000069905

Searcher : Shears 571-272-2528

AU 767390	B	Previous Publ.	AU 2000043860
		Based on	WO 2000069905
AU 2004200487	A1	Div ex	AU 767390

PRIORITY APPLN. INFO: US 1999-133986P 19990513
AN 2001-016211 [02] WPIDS
AB WO 200069905 A UPAB: 20010110
NOVELTY - A novel isolated or recombinant immunogenic **polypeptide** mimics or cross-reacts with a B-cell or T-cell epitope of a Lawsonia spp. OmpH **polypeptide**.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) an isolated or recombinant immunogenic **polypeptide** comprising:

(i) a **peptide**, oligopeptide or **polypeptide** which comprises an amino acid sequence having at least about 70% sequence identity overall to a fully defined 186 aa sequence (I) (given in the specification); or

(ii) a homolog, analog or derivative of (i) which mimics a B-cell or T-cell epitope of a Lawsonia spp. OmpH **polypeptide**;

(2) a vaccine composition for the prophylaxis or treatment of infection of an animal by Lawsonia spp., comprising an immunogenic component derived from an isolated or recombinant **polypeptide** having at least about 70% sequence identity overall to (I) or an immunogenic homolog, analog or derivative which is immunologically cross-reactive with **L. intracellularis**, and one or more carriers, diluents or adjuvants;

(3) a combination vaccine composition for the prophylaxis or treatment of infection of an animal by Lawsonia spp .comprising:

(i) a first immunogenic component comprising an isolated or recombinant **polypeptide** having at least about 70% sequence identity to (I) or an immunogenic homolog, analog, or derivative which is immunologically cross-reactive with **L. intracellularis**
;

(ii) a second immunogenic component comprising an antigenic **L. intracellularis peptide**, **polypeptide** or **protein**; and

(iii) one or more carriers, diluents or adjuvants suitable for veterinary or pharmaceutical use;

(4) a vaccine vector that comprises, in an expressible form, an isolated nucleic acid molecule having a nucleotide sequence that encodes (I), such that the immunogenic **polypeptide** is expressible at a level to confer immunity against Lawsonia spp., when administered to a porcine or avian animal;

(5) a poly- or monoclonal **antibody** molecule capable of binding specifically to a OmpH **polypeptide** or a derivative of a OmpH **polypeptide** that is derived from Lawsonia spp. having at least about 70% sequence identity to (I);

(6) an isolated nucleic acid molecule (NAM) comprising a sequence of nucleotides, or their complements which encode, a **peptide**, oligopeptide or **polypeptide** selected from:

(i) a **peptide**, oligopeptide or **polypeptide** which comprises an amino acid sequence which has at least about 70% sequence identity overall to an amino acid sequence (I); and

(ii) a homolog, analog or derivative of (i) which mimics a B-cell or T-cell epitope of Lawsonia spp.;

(7) a method of detecting **L. intracellularis** or related microorganism in a biological sample derived from a porcine or avian animal subject comprising hybridizing one or more probes or primers derived from a fully defined 561 bp nucleotide sequence (NS) (II), or its complements to the sample and then detecting the hybridization using a detection device;

(8) a probe or primer having at least about 15 contiguous nucleotides in length derived from (II) or its complements;

(9) a plasmid designated pALK13 (ATCC No: 207196).

USE - The **polypeptides** are capable of eliciting the production of **antibodies** against Lawsonia spp. when administered to an avian or porcine animal (claimed). They can be used for conferring a protective immune response against Lawsonia spp. when administered to an avian or porcine animal (claimed). They can be used for the prophylaxis or treatment of an infection of an animal by Lawsonia spp. (claimed). The nucleic acids can also be used for prophylaxis or treatment of infections. The products can also be used for detection, e.g. for detecting whether or not a porcine or avian animal has suffered from a past infection or is currently infected with **L. intracellularis**. They are used particularly for porcine proliferative enteropathy (PPE) infections.

Dwg.0/3

L4 ANSWER 13 OF 21 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2001-016210 [02] WPIDS
DOC. NO. CPI: C2001-004515
TITLE: New immunogenic Lawsonia FlgE **peptide**, its nucleic acid and **antibody**, useful in vaccines and diagnosis of Lawsonia infections, particularly in swine.
DERWENT CLASS: B04 D16
INVENTOR(S): ANKENBAUER, R G; HASSE, D; PANACCIO, M; PARSONS, J; ROZEY, E L; SINISTAJ, M; ROSEY, E L; ANKENBAUER, R
PATENT ASSIGNEE(S): (AGRI-N) AGRIC VICTORIA SERVICES PTY LTD; (PFIZ) PFIZER PROD INC; (PIGR-N) PIG RES & DEV CORP; (AUPO-N) AUSTRALIAN PORK LTD; (ANKE-I) ANKENBAUER R G; (HASS-I) HASSE D; (PANA-I) PANACCIO M; (PARS-I) PARSONS J; (ROSE-I) ROSEY E L; (SINI-I) SINISTAJ M
COUNTRY COUNT: 93
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000069904	A1	20001123	(200102)*	EN	95
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2000043859	A	20001205	(200113)		
EP 1181315	A1	20020227	(200222)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
BR 2000011294	A	20020226	(200223)		
JP 2003516113	W	20030513	(200334)		102
US 2003157120	A1	20030821	(200356)		

Searcher : Shears 571-272-2528

NZ 515331 A 20030725 (200357)
AU 771376 B2 20040318 (200454)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000069904	A1	WO 2000-AU437	20000511
AU 2000043859	A	AU 2000-43859	20000511
EP 1181315	A1	EP 2000-924976	20000511
		WO 2000-AU437	20000511
BR 2000011294	A	BR 2000-11294	20000511
		WO 2000-AU437	20000511
JP 2003516113	W	JP 2000-618320	20000511
		WO 2000-AU437	20000511
US 2003157120	A1	WO 2000-AU437	20000511
		US 2002-9823	20020813
NZ 515331	A	NZ 2000-515331	20000511
		WO 2000-AU437	20000511
AU 771376	B2	AU 2000-43859	20000511

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000043859	A	Based on	WO 2000069904
EP 1181315	A1	Based on	WO 2000069904
BR 2000011294	A	Based on	WO 2000069904
JP 2003516113	W	Based on	WO 2000069904
NZ 515331	A	Based on	WO 2000069904
AU 771376	B2	Previous Publ.	AU 2000043859
		Based on	WO 2000069904

PRIORITY APPLN. INFO: US 1999-133973P 19990513
AN 2001-016210 [02] WPIDS
AB WO 200069904 A UPAB: 20030906
NOVELTY - Isolated or recombinant **polypeptide** (I) that comprises, mimics or cross-reacts with a B- or T-cell epitope of a FlgE (flagellar hook) **polypeptide** from a Lawsonia spp.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a vaccine comprising,at least one carrier, diluent or adjuvant and a (I) that has at least 60% sequence identity overall with a fully defined 502 aa sequence (1), (given in the specification) or its immunogenic homolog, analog or derivative that is immunologically cross-reactive with **L. intracellularis**;

(2) a vaccine vector comprising, in expressible form, a nucleic acid sequence (II) that encodes (1);

(3) a poly- or mono-clonal **antibody** (Ab) that binds to Lawsonia FlgE **polypeptide**, or its derivatives, that have at least 60% sequence identity with (1);

(4) an isolated nucleic acid (III) that encodes a **peptide**, oligopeptide or **polypeptide** having at least 60% sequence identity with (1) or its homolog, analog or derivative that mimics a B- or T-cell epitope, also complements of (III);

(5) a probe or primer containing at least 15 contiguous nucleotides

from a fully defined 1509 bp sequence (2), (given in the specification) or its complement; and

(6) a plasmid pALK11 (ATCC 207156).

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - Induction of a specific humoral immune response. No data given.

USE - (I) are used as antigens in vaccines to prevent or treat infection by Lawsonia, in birds and animals, especially pigs, to raise specific **antibodies** (Ab) and to detect past or present infection. Ab are also useful in diagnosis, to detect **L. intracellularis** or immunologically cross-reactive species (claimed), also for identification of epitopes in FlgE. Vectors that contain nucleic acid (II) that encodes (I) are also useful in genetic vaccines, and fragments of (II) are useful as primers or probes for detecting **L. intracellularis** or related microorganisms, in hybridization or amplification assays.

Dwg.0/1

L4 ANSWER 14 OF 21 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2001-031924 [04] WPIDS
DOC. NO. CPI: C2001-009790
TITLE: Isolated or recombinant **polypeptide** for treating porcine and avian species against **Lawsonia intracellularis** infection, comprises, mimics or cross-reacts with the B or T cell epitope of Lawsonia SodC **polypeptide**.
DERWENT CLASS: B04 D16
INVENTOR(S): ANKENBAUER, R G; HASSE, D; PANACCIO, M; ROSEY, E L; WRIGHT, C; ANKENBAUER, R
PATENT ASSIGNEE(S): (AGRI-N) AGRIC VICTORIA SERVICES PTY LTD; (PFIZ) PFIZER PROD INC; (PIGR-N) PIG RES & DEV CORP; (AUPO-N) AUSTRALIAN PORK LTD
COUNTRY COUNT: 93
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000069903	A1	20001123	(200104)*	EN	85
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2000043858	A	20001205	(200113)		
EP 1177212	A1	20020206	(200218)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
BR 2000011292	A	20020226	(200223)		
JP 2003501013	W	20030114	(200306)		89
NZ 515332	A	20040130	(200414)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

WO 2000069903	A1	WO 2000-AU436	20000511
AU 2000043858	A	AU 2000-43858	20000511
EP 1177212	A1	EP 2000-924975	20000511
		WO 2000-AU436	20000511
BR 2000011292	A	BR 2000-11292	20000511
		WO 2000-AU436	20000511
JP 2003501013	W	JP 2000-618319	20000511
		WO 2000-AU436	20000511
NZ 515332	A	NZ 2000-515332	20000511
		WO 2000-AU436	20000511

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000043858	A	Based on	WO 2000069903
EP 1177212	A1	Based on	WO 2000069903
BR 2000011292	A	Based on	WO 2000069903
JP 2003501013	W	Based on	WO 2000069903
NZ 515332	A	Based on	WO 2000069903

PRIORITY APPLN. INFO: US 1999-133989P 19990513

AN 2001-031924 [04] WPIDS

AB WO 200069903 A UPAB: 20010118

NOVELTY - An isolated or recombinant immunogenic **polypeptide** (I) which comprises, mimics or cross-reacts with a B-cell or T-cell epitope of a Lawsonia SodC **polypeptide**, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a vaccine composition (II) for the prophylaxis or treatment of infection of an animal by Lawsonia comprising an immunogenic component which comprises (I), which is immunologically cross-reactive with **Lawsonia intracellularis** and one or more carriers, diluents or adjuvants suitable for veterinary or pharmaceutical use;

(2) a combination vaccine composition (III) for the prophylaxis or treatment of infection of an animal by Lawsonia comprising, a first immunogenic component which comprises (I), a second immunogenic component comprising an antigenic **L. intracellularis peptide, polypeptide** or **protein** and one or more carriers, diluents or adjuvants suitable for veterinary or pharmaceutical use;

(3) a vaccine vector (IV) comprising, in an expressible form, an isolated nucleic acid molecule having a nucleotide sequence that encodes an isolated or recombinant immunogenic **polypeptide** which comprises the sequence (S) such that the immunogenic **polypeptide** is expressible at a level sufficient to confer immunity against Lawsonia, when administered to a porcine or avian animal;

(4) a polyclonal or monoclonal **antibody** molecule (V) that is capable of binding specifically to (I);

(5) an isolated nucleic acid molecule (VI) that encodes (I), or its complement;

(6) a probe or primer (VII) having at least 15 contiguous nucleotides in length derived from the fully defined sequence of 543 base pairs (bp) as given in the specification or its complement; and

(7) a plasmid designated pALK14 (ATCC 207155).

ACTIVITY - Antibacterial.

No biological data is given.
MECHANISM OF ACTION - Vaccine.
No biological data is given.
USE - (I) is useful for diagnosing infection of a porcine or avian animal or identifying whether or not the animal has suffered from a past infection or is currently infected with **L. intracellularis** or a microorganism that is immunologically cross-reactive to it, by contacting whole serum, blood lymph nodes, ileum, caecum, small intestine, large intestine, feces or rectal swab derived from the animal with (V) or (I) for a time and under conditions sufficient for an antigen:**antibody** complex to form and detecting the complex formed. (VII) is useful for detecting **L. intracellularis** or related microorganisms in a sample derived from the animal by hybridizing (VII) or its complement to the sample and then detecting the hybridization using a nucleic acid based hybridization or amplification reaction. (I) is useful in the preparation of a medicament for the treatment and prophylaxis of porcine proliferative enteropathy (PPE) in animals, particularly porcine or avian animals. (IV) is useful for producing a proteinaceous immunogenic component of (II) or (III) or is useful in a DNA vaccine. (II) and (III) are useful for treatment and/or prophylaxis of porcine and/or avian species against any bacterium belonging to the same serovar or serogroup as **L. intracellularis**.
Dwg.0/0

L4 ANSWER 15 OF 21 MEDLINE on STN DUPLICATE 3
ACCESSION NUMBER: 2001041976 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10945299
TITLE: Immunohistochemistry and polymerase chain reaction for the detection of **Lawsonia intracellularis** in porcine intestinal tissues with proliferative enteropathy.
AUTHOR: Kim J; Choi C; Cho W S; Chae C
CORPORATE SOURCE: Department of Veterinary Pathology, College of Veterinary Medicine and School of Agricultural Biotechnology, Seoul National University, Suwon, Kyounggi-Do, Republic of Korea.
SOURCE: Journal of veterinary medical science / the Japanese Society of Veterinary Science, (2000 Jul) 62 (7) 771-3. Journal code: 9105360. ISSN: 0916-7250.
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200012
ENTRY DATE: Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20001207

AB Detection method of **Lawsonia intracellularis** was studied in formalin-fixed paraffin-embedded intestinal tissues from 5 naturally infected pigs by immunohistochemistry with a monoclonal **antibody** against outer membrane **protein** of **L. intracellularis**. Warthin-Starry silver stain revealed clusters of argyrophilic, slightly curved rod-shaped organisms in the apical cytoplasm of enterocytes. Immunohistochemical staining with a **L. intracellularis**-specific monoclonal **antibody** confirmed the presence of the organism in the apical cytoplasm of hyperplastic

enterocytes. The presence of **L. intracellularis** in the ileum of pig with proliferative enteropathy was confirmed by polymerase chain reaction (PCR) further on the basis of amplification of 319 base pair products specific for porcine **L. intracellularis** chromosomal DNA. Immunohistochemistry and PCR may be a complementary method to confirm the diagnosis of **L. intracellularis** infection in pigs.

L4 ANSWER 16 OF 21 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation. on STN
ACCESSION NUMBER: 2000:457260 SCISEARCH
THE GENUINE ARTICLE: 323LF
TITLE: Production and characterization of biologically active human GM-CSF secreted by genetically modified plant cells
AUTHOR: James E A; Wang C L; Wang Z P; Reeves R; Shin J H; Magnuson N S; Lee J M (Reprint)
CORPORATE SOURCE: WASHINGTON STATE UNIV, DEPT CHEM ENGN, PULLMAN, WA 99164 (Reprint); WASHINGTON STATE UNIV, DEPT CHEM ENGN, PULLMAN, WA 99164; WASHINGTON STATE UNIV, SCH MOL BIOSCI, PULLMAN, WA 99164
COUNTRY OF AUTHOR: USA
SOURCE: PROTEIN EXPRESSION AND PURIFICATION, (JUN 2000) Vol. 19, No. 1, pp. 131-138.
Publisher: ACADEMIC PRESS INC, 525 B ST, STE 1900, SAN DIEGO, CA 92101-4495.
ISSN: 1046-5928.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 25

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Human. granulocyte-macrophage colony-stimulating factor (GM-CSF), a hemopoietic growth factor, was produced and secreted from tobacco cell suspensions. The GM-CSF cDNA was carried by a binary vector under the control of the CaMV 35S promoter and the T7 terminator. In addition, a 5'-nontranslated region from the tobacco etch virus (TEV leader sequence) was fused to the N-terminal end of the GM-CSF transgene, For ease of purification, a g-His tag was added to the 3' end of the GM-CSF cDNA. Addition of the TEV leader sequence increased **protein** production more than twofold compared to non-TEV controls, Initial batch cultivation studies indicated a maximum of 250 mu g/L extracellular and 150 mu g/ **L intracellular** GM-CSF. Western blot analysis detected multiple **peptides** with masses from 14 to 30 kDa in the extracellular medium. The plant-produced GM-CSF was biologically active and could be bound to a nickel affinity matrix, indicating that both the receptor-binding region and the g-His tag were functional. The batch production of GM-CSF was compared with the production of other recombinant **proteins** secreted by transformed tobacco cells. The recovery of secreted GM-CSF was increased by the addition of stabilizing **proteins** and by increasing salt in the growth medium to physiological levels. (C) 2000 Academic Press.

L4 ANSWER 17 OF 21 MEDLINE on STN
ACCESSION NUMBER: 1998198779 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9539372
TITLE: Specific detection of **Lawsonia**

intracellularis in porcine proliferative enteropathy inferred from fluorescent rRNA in situ hybridization.

AUTHOR: Boye M; Jensen T K; Moller K; Leser T D; Jorsal S E
CORPORATE SOURCE: Danish Veterinary Laboratory, Copenhagen V.. mbo@svs.dk
SOURCE: Veterinary pathology, (1998 Mar) 35 (2) 153-6.
Journal code: 0312020. ISSN: 0300-9858.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199806
ENTRY DATE: Entered STN: 19980611
Last Updated on STN: 19980611
Entered Medline: 19980604

AB Fluorescent in situ hybridization targeting 16S ribosomal RNA was used for specific detection of the obligate intracellular bacterium **Lawsonia intracellularis** in enterocytes from pigs affected by proliferative enteropathy. A specific oligonucleotide probe was designed and the specificity of the probe was determined by simultaneous comparison with indirect immunofluorescence assay for detection of **L. intracellularis** in formalin-fixed tissue samples from 15 pigs affected by porcine proliferative enteropathy. We used 10 tissue samples from pigs without proliferative mucosal changes as negative controls. The results showed that the oligonucleotide probe is specific for **L. intracellularis** and that fluorescent in situ hybridization targeting ribosomal RNA is a suitable and fast method for specific detection and histological recognition of **L. intracellularis** in formalin-fixed tissue.

L4 ANSWER 18 OF 21 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 1997-310605 [28] WPIDS
DOC. NO. CPI: C1997-099977
TITLE: Vaccine for treating or preventing **Lawsonia intracellularis** infection - especially in pigs, containing non-pathogenic form of bacterium or its components.
DERWENT CLASS: B04 C06 D16
INVENTOR(S): HASSE, D; PANACCIO, M
PATENT ASSIGNEE(S): (DARA-N) DARATECH PTY LTD; (PIGR-N) PIG RES & DEV CORP; (AGRI-N) AGRIC VICTORIA SERVICES PTY LTD
COUNTRY COUNT: 75
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9720050	A1	19970605	(199728)*	EN	94
RW: AT BE CH DE DK EA ES FI FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN					
AU 9676141	A	19970619	(199741)		
EP 871735	A1	19981021	(199846)	EN	
R: AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC NL PT RO SE SI					

CN 1203630	A	19981230 (199920)	
NZ 322398	A	20000228 (200017)	
BR 9611623	A	19991228 (200018)	
JP 2000502054	W	20000222 (200020)	95
AU 718333	B	20000413 (200028)	
MX 9804261	A1	19990501 (200056)	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9720050	A1	WO 1996-AU767	19961129
AU 9676141	A	AU 1996-76141	19961129
EP 871735	A1	EP 1996-938863	19961129
		WO 1996-AU767	19961129
CN 1203630	A	CN 1996-198666	19961129
NZ 322398	A	NZ 1996-322398	19961129
		WO 1996-AU767	19961129
BR 9611623	A	BR 1996-11623	19961129
		WO 1996-AU767	19961129
JP 2000502054	W	WO 1996-AU767	19961129
		JP 1997-520010	19961129
AU 718333	B	AU 1996-76141	19961129
MX 9804261	A1	MX 1998-4261	19980528

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9676141	A	Based on	WO 9720050
EP 871735	A1	Based on	WO 9720050
NZ 322398	A	Based on	WO 9720050
BR 9611623	A	Based on	WO 9720050
JP 2000502054	W	Based on	WO 9720050
AU 718333	B	Previous Publ.	AU 9676141
		Based on	WO 9720050

PRIORITY APPLN. INFO: AU 1995-6911 19951130; AU 1995-6910 19951130

AN 1997-310605 [28] WPIDS

AB WO 9720050 A UPAB: 19970709

Novel vaccine for the prophylaxis or treatment of **Lawsonia intracellularis**, or related microorganism (RM), infection in animals and birds, comprises an immunogenic, non-pathogenic form of **L. intracellularis**, or a RM, or an immunogenic component, plus diluents and/or adjuvants. Also new are: (1) isolated nucleic acid molecule having 1 of the 14 sequences given in the specification, or a sequence with at least 40% similarity, which is capable of hybridising to it under conditions of low stringency, and encodes an immunogenic **peptide**, **polypeptide** or **protein** of **L. intracellularis**, or a RM; and (2) genetic vaccine comprising the nucleic acid molecule.

USE - The vaccines are especially administered to pigs in which **L. intracellularis**, or a RM, causes porcine proliferative enteropathy (PPE). Also contemplated (not claimed) is the use of **antibodies** (Ab) specific to **L.**

intracellularis, or RM, components in immunotherapy or vaccination, or for diagnosing infection or monitoring the effects of vaccination or treatment. Natural Ab can be detected using recombinant **L. intracellularis**, or RM, **proteins**, etc..

ADVANTAGE - The vaccine is an effective alternative to treatment with antibiotics.

Dwg.0/4

L4 ANSWER 19 OF 21 MEDLINE on STN DUPLICATE 4
ACCESSION NUMBER: 97254956 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9100338
TITLE: In-vitro interactions of **Lawsonia intracellularis** with cultured enterocytes.
AUTHOR: McOrist S; Mackie R A; Lawson G H; Smith D G
CORPORATE SOURCE: Department of Veterinary Pathology, University of Edinburgh, Easter Bush, Midlothian, UK.
SOURCE: Veterinary microbiology, (1997 Mar) 54 (3-4) 385-92. Journal code: 7705469. ISSN: 0378-1135.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199706
ENTRY DATE: Entered STN: 19970630
Last Updated on STN: 20000303
Entered Medline: 19970619

AB Strains of the obligately intracellular bacterium **Lawsonia intracellularis**, the etiologic agent of porcine proliferative enteropathy, were co-cultured in rat enterocyte cell cultures (IEC-18) and examined ultrastructurally. No regular surface arrays typical of surface or S-layers were visible on any bacterial strain, with or without Triton-X-100 detergent treatment. In separate experiments, there was no difference in the ability of **L. intracellularis** to attach and enter enterocytes with or without the presence of added bovine plasma fibronectin, or the **peptide** Arg-Gly-Ser. Interestingly, there was an increase in the invasiveness of **L. intracellularis** in the presence of the **peptide** Arg-Gly-Asp (RGD), in a dose-related manner. A reduction was observed in the ability of **L. intracellularis** to invade enterocytes in the presence of monovalent fragments of IgG monoclonal **antibodies** to an outer surface component of **L. intracellularis**. This neutralization showed an **antibody** concentration-dependent titration effect and was not apparent with co-cultures incorporating control **antibodies**. The exact nature of ligand and cell receptor interactions for **L. intracellularis** remain to be determined.

L4 ANSWER 20 OF 21 MEDLINE on STN DUPLICATE 5
ACCESSION NUMBER: 97218646 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9066083
TITLE: Intracellular Campylobacter-like organisms associated with rectal prolapse and proliferative enteroproctitis in emus (Dromaius novaehollandiae).
AUTHOR: Lemarchand T X; Tully T N Jr; Shane S M; Duncan D E
CORPORATE SOURCE: Department of Pathology, School of Veterinary Medicine, Louisiana State University, Baton Rouge 70803, USA.

SOURCE: Veterinary pathology, (1997 Mar) 34 (2) 152-6.
Journal code: 0312020. ISSN: 0300-9858.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199705
ENTRY DATE: Entered STN: 19970602
Last Updated on STN: 20000303
Entered Medline: 19970522

AB Rectal prolapse was the presenting clinical finding in a group of juvenile emus (Dromaius novaehollandiae). Gross findings included severely thickened and rugose distal rectal mucosae. Histologically, there were thickened villi, enterocyte hyperplasia, dilated glands filled with mucus and heterophils, and a dense infiltrate of heterophils, macrophages, lymphocytes, and plasma cells in the lamina propria. Examination of Warthin-Starry silver-stained sections revealed numerous apically located comma-shaped intracytoplasmic bacteria approximately 1 x 3 microns in size. Campylobacter-like organisms morphologically compatible with ileal symbiont intracellularis now known as **Lawsonia intracellularis** were seen via electron microscopy. Bacteria were further characterized by indirect immunofluorescence using monoclonal **antibody** specific for the 25-27-kd outer membrane **protein** of **L. intracellularis**.

L4 ANSWER 21 OF 21 JAPIO (C) 2004 JPO on STN
ACCESSION NUMBER: 2003-000276 JAPIO
TITLE: **LAWSONIA INTRACELLULIS** VACCINE
INVENTOR: JACOBS ANTONIUS ARNOLDUS C; VERMEIJ PAUL
PATENT ASSIGNEE(S): AKZO NOBEL NV
PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 2003000276	A	20030107	Heisei	C12N015-09

APPLICATION INFORMATION
STN FORMAT: JP 2001-385373 20011219
ORIGINAL: JP2001385373 Heisei
PRIORITY APPLN. INFO.: EP 2000-204660 20001220
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 2003

AN 2003-000276 JAPIO
AB PROBLEM TO BE SOLVED: To develop methods for diagnosing, preventing and treating swine proliferative intestinal diseases.
SOLUTION: This invention relates to nucleic acid sequences encoding novel **Lawsonia intracellularis proteins**. It furthermore relates to DNA fragments, recombinant DNA molecules and live recombinant carriers comprising these sequences. Also it relates to host cells comprising such nucleic acid sequences, DNA fragments, recombinant DNA molecules and live recombinant carriers. Moreover, the invention relates to **proteins** encoded with these nucleotide sequences. The invention also relates to vaccines for combating **Lawsonia intracellularis** infections and methods for the preparation thereof. Finally, the invention relates to diagnostic tests for the detection of **Lawsonia intracellularis** DNA, the

detection of **Lawsonia intracellularis** antigens and of **antibodies** against **Lawsonia intracellularis**.

(FILE 'USPATFULL' ENTERED AT 14:15:01 ON 03 SEP 2004)
L5 22 SEA FILE=USPATFULL ABB=ON PLU=ON ((LAWSON? OR L)(W)INTRACELLU L?)(S)(POLYPEPTIDE OR PEPTIDE OR PROTEIN OR POLYPROTEIN)
L6 13 SEA FILE=USPATFULL ABB=ON PLU=ON L5(S)ANTIBOD?

L6 ANSWER 1 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2004:109095 USPATFULL
TITLE: Nucleic acids and corresponding proteins entitled 191P4D12(b) useful in treatment and detection of cancer
INVENTOR(S): Raitano, Arthur B., Los Angeles, CA, UNITED STATES
Challita-Eid, Pia M., Encino, CA, UNITED STATES
Jakobovits, Aya, Beverly Hills, CA, UNITED STATES
Faris, Mary, Los Angeles, CA, UNITED STATES
Ge, Wangmao, Culver City, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004083497	A1	20040429	
APPLICATION INFO.:	US 2003-422571	A1	20030423	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-404306P	20020816 (60)
	US 2002-423290P	20021101 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MORRISON & FOERSTER LLP, 3811 VALLEY CENTRE DRIVE, SUITE 500, SAN DIEGO, CA, 92130-2332
NUMBER OF CLAIMS: 46
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 77 Drawing Page(s)
LINE COUNT: 24550
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel gene 191P4D12(b) and its encoded protein, and variants thereof, are described wherein 191P4D12(b) exhibits tissue specific expression in normal adult tissue, and is aberrantly expressed in the cancers listed in Table I. Consequently, 191P4D12(b) provides a diagnostic, prognostic, prophylactic and/or therapeutic target for cancer. The 191P4D12(b) gene or fragment thereof, or its encoded protein, or variants thereof, or a fragment thereof, can be used to elicit a humoral or cellular immune response; antibodies or T cells reactive with 191P4D12(b) can be used in active or passive immunization.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 800/009.000
INCLS: 424/155.100; 435/006.000; 435/007.230; 435/069.100; 435/320.100; 435/325.000; 514/044.000; 536/023.500; 530/350.000
NCL NCLM: 800/009.000
NCLS: 424/155.100; 435/006.000; 435/007.230; 435/069.100; 435/320.100; 435/325.000; 514/044.000; 536/023.500; 530/350.000

L6 ANSWER 2 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2004:82312 USPATFULL
TITLE: Nucleic acid and corresponding protein entitled 151P3D4 useful in treatment and detection of cancer
INVENTOR(S): Challita-Eid, Pia M., Encino, CA, UNITED STATES
Raitano, Arthur B., Los Angeles, CA, UNITED STATES
Faris, Mary, Los Angeles, CA, UNITED STATES
Hubert, Rene S., Los Angeles, CA, UNITED STATES
Morrison, Karen Jane Meyrick, Santa Monica, CA, UNITED STATES
Morrison, Robert Kendall, Santa Monica, CA, UNITED STATES
Ge, Wangmao, Culver City, CA, UNITED STATES
Jakobovits, Aya, Beverly Hills, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004062761	A1	20040401	
APPLICATION INFO.:	US 2002-120907	A1	20020409	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2001-286630P	20010425	(60)
	US 2001-282739P	20010410	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Kate H. Murashige, Morrison & Foerster LLP, Suite 500, 3811 Valley Centre Drive, San Diego, CA, 92130-2332
NUMBER OF CLAIMS: 51
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 58 Drawing Page(s)
LINE COUNT: 27954
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A novel gene (designated 151P3D4) and its encoded protein, and variants thereof, are described wherein 151P3D4 exhibits tissue specific expression in normal adult tissue, and is aberrantly expressed in the cancers listed in Table I. Consequently, 151P3D4 provides a diagnostic, prognostic, prophylactic and/or therapeutic target for cancer. The 151P3D4 gene or fragment thereof, or its encoded protein, or variants thereof, or a fragment thereof, can be used to elicit a humoral or cellular immune response; antibodies or T cells reactive with 151P3D4 can be used in active or passive immunization.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/130.100
INCLS: 530/387.100; 435/326.000; 530/350.000; 800/008.000
NCL NCLM: 424/130.100
NCLS: 530/387.100; 435/326.000; 530/350.000; 800/008.000

L6 ANSWER 3 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2004:26071 USPATFULL
TITLE: Nucleic acid and corresponding protein entitled 213P1F11 useful in treatment and detection of cancer
INVENTOR(S): Challita-Eid, Pia M., Encino, CA, UNITED STATES
Raitano, Arthur B., Los Angeles, CA, UNITED STATES
Faris, Mary, Los Angeles, CA, UNITED STATES
Hubert, Rene S., Los Angeles, CA, UNITED STATES

Morrison, Robert Kendall, Santa Monica, CA, UNITED STATES
GE, Wangmao, Culver City, CA, UNITED STATES
Jakobovits, Aya, Beverly Hills, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004019915	A1	20040129	
APPLICATION INFO.:	US 2002-114432	A1	20020401	(10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Kate H. Murashige, Morrison & Foerster LLP, Suite 500, 3811 Valley Centre Drive, San Diego, CA, 92130-2332
NUMBER OF CLAIMS: 51
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 60 Drawing Page(s)
LINE COUNT: 19089
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A novel gene (designated 213P1F11) and its encoded protein, and variants thereof, are described wherein 213P1F11 exhibits tissue specific expression in normal adult tissue, and is aberrantly expressed in the cancers listed in Table I. Consequently, 213P1F11 provides a diagnostic, prognostic, prophylactic and/or therapeutic target for cancer. The 213P1F11 gene or fragment thereof, or its encoded protein, or variants thereof, or a fragment thereof, can be used to elicit a humoral or cellular immune response; antibodies or T cells reactive with 213P1F11 can be used in active or passive immunization.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 800/006.000
INCLS: 424/146.100; 530/388.260; 435/338.000
NCL NCLM: 800/006.000
NCLS: 424/146.100; 530/388.260; 435/338.000

L6 ANSWER 4 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2004:24351 USPATFULL
TITLE: Nucleic acid and corresponding protein entitled 121P2A3 useful in treatment and detection of cancer
INVENTOR(S): Challita-Eid, Pia M., Encino, CA, UNITED STATES
Raitano, Arthur B., Los Angeles, CA, UNITED STATES
Faris, Mary, Los Angeles, CA, UNITED STATES
Hubert, Rene S., Los Angeles, CA, UNITED STATES
Mitchell, Steve Chappell, Gurnee, IL, UNITED STATES
Afar, Daniel E. H., Brisbane, CA, UNITED STATES
Saffran, Douglas, Encinitas, CA, UNITED STATES
Morrison, Karen Jane Meyrick, Santa Monica, CA, UNITED STATES
Morrison, Robert Kendall, Santa Monica, CA, UNITED STATES
Ge, Wangmao, Culver City, CA, UNITED STATES
Jakobovits, Aya, Beverly Hills, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004018189	A1	20040129	
APPLICATION INFO.:	US 2002-120835	A1	20020409	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-300373P	20010622 (60)
	US 2001-286630P	20010425 (60)
	US 2001-282739P	20010410 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Robert K. Cerpa, Morrison & Foerster LLP, Suite 500, 3811 Valley Centre Drive, San Diego, CA, 92130
NUMBER OF CLAIMS: 51
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 60 Drawing Page(s)
LINE COUNT: 19428
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A novel gene (designated 121P2A3) and its encoded protein, and variants thereof, are described wherein 121P2A3 exhibits tissue specific expression in normal adult tissue, and is aberrantly expressed in the cancers listed in Table I. Consequently, 121P2A3 provides a diagnostic, prognostic, prophylactic and/or therapeutic target for cancer. The 121P2A3 gene or fragment thereof, or its encoded protein, or variants thereof, or a fragment thereof, can be used to elicit a humoral or cellular immune response; antibodies or T cells reactive with 121P2A3 can be used in active or passive immunization.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/130.100
INCLS: 800/006.000; 435/326.000; 530/388.100
NCL NCLM: 424/130.100
NCLS: 800/006.000; 435/326.000; 530/388.100

L6 ANSWER 5 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2004:20696 USPATFULL
TITLE: Nucleic acid and corresponding protein entitled 238P1B2 useful in treatment and detection of cancer
INVENTOR(S): Raitano, Arthur B., Los Angeles, CA, UNITED STATES
Challita-Eid, Pia M., Encino, CA, UNITED STATES
Faris, Mary, Los Angeles, CA, UNITED STATES
Hubert, Rene S., Los Angeles, CA, UNITED STATES
Morrison, Robert Kendall, Santa Monica, CA, UNITED STATES
Ge, Wangmao, Culver City, CA, UNITED STATES
Jakobovits, Aya, Beverly Hills, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004016004	A1	20040122
APPLICATION INFO.:	US 2002-114669	A1	20020401 (10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Kate H. Murashige, Morrison & Foerster LLP, Suite 500, 3811 Valley Centre Drive, San Diego, CA, 92130
NUMBER OF CLAIMS: 50
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 54 Drawing Page(s)
LINE COUNT: 15841

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel gene (designated 238P1B2) and its encoded protein, and variants thereof, are described wherein 238P1B2 exhibits tissue specific expression in normal adult tissue, and is aberrantly expressed in the cancers listed in Table I. Consequently, 238P1B2 provides a diagnostic, prognostic, prophylactic and/or therapeutic target for cancer. The 238P1B2 gene or fragment thereof, or its encoded protein, or variants thereof, or a fragment thereof, can be used to elicit a humoral or cellular immune response; antibodies or T cells reactive with 238P1B2 can be used in active or passive immunization.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 800/006.000
INCLS: 424/146.100; 530/388.260; 435/338.000
NCL NCLM: 800/006.000
NCLS: 424/146.100; 530/388.260; 435/338.000

L6 ANSWER 6 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2004:14288 USPATFULL
TITLE: Nucleic acid and corresponding protein entitled 162P1E6 useful in treatment and detection of cancer
INVENTOR(S): Challita-Eid, Pia M., Encino, CA, UNITED STATES
Raitano, Arthur B., Los Angeles, CA, UNITED STATES
Faris, Mary, Los Angeles, CA, UNITED STATES
Hubert, Rene S., Los Angeles, CA, UNITED STATES
Morrison, Karen Jane Meyrick, Santa Monica, CA, UNITED STATES
Morrison, Robert Kendall, Santa Monica, CA, UNITED STATES
Ge, Wangmao, Culver City, CA, UNITED STATES
Jakobovits, Aya, Beverly Hills, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004010811	A1	20040115	
APPLICATION INFO.:	US 2002-121016	A1	20020409	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2001-286630P	20010425	(60)
	US 2001-283112P	20010410	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Kate H. Murashige, Morrison & Foerster LLP, Suite 500, 3811 Valley Centre Drive, San Diego, CA, 92130
NUMBER OF CLAIMS: 51
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 86 Drawing Page(s)
LINE COUNT: 23445
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel gene (designated 162P1E6) and its encoded protein, and variants thereof, are described wherein 162P1E6 exhibits tissue specific expression in normal adult tissue, and is aberrantly expressed in the cancers listed in Table I. Consequently, 162P1E6 provides a diagnostic, prognostic, prophylactic and/or therapeutic target for cancer. The 162P1E6 gene or fragment thereof, or its encoded protein, or variants

thereof, or a fragment thereof, can be used to elicit a humoral or cellular immune response; antibodies or T cells reactive with 162P1E6 can be used in active or passive immunization.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 800/008.000
INCLS: 424/146.100; 514/044.000; 530/388.260; 435/338.000
NCL NCLM: 800/008.000
NCLS: 424/146.100; 514/044.000; 530/388.260; 435/338.000

L6 ANSWER 7 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2004:2426 USPATFULL
TITLE: METH1 and METH2 polynucleotides and polypeptides
INVENTOR(S): Iruela-Arispe, Luisa, Los Angeles, CA, UNITED STATES
Hastings, Gregg A., Westlake Village, CA, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
Jonak, Zdenka L., Devon, PA, UNITED STATES
Trulli, Stephen H., Havertown, PA, UNITED STATES
Fornwald, James A., Norristown, PA, UNITED STATES
Terrett, Jonathan A., Oxfordshire, UNITED KINGDOM
PATENT ASSIGNEE(S): Human Genome Sciences, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004002449	A1	20040101
APPLICATION INFO.:	US 2001-989687	A1	20011121 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2000-US14462, filed on 25 May 2000, PENDING Continuation-in-part of Ser. No. US 1999-318208, filed on 25 May 1999, ABANDONED Continuation-in-part of Ser. No. US 1999-373658, filed on 13 Aug 1999, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-171503P	19991222 (60)
	US 2000-183792P	20000222 (60)
	US 1999-144882P	19990720 (60)
	US 1999-147823P	19990810 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., SUITE 600, WASHINGTON, DC, 20005-3934
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Page(s)
LINE COUNT: 28864
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel anti-angiogenic proteins, related to thrombospondin. More specifically, isolated nucleic acid molecules are provided encoding human METH1 and METH2. METH1 and METH2 polypeptides are also provided, as are vectors, host cells and recombinant methods for producing the same. Also provided are diagnostic methods for the prognosis of cancer and therapeutic methods for treating individuals in need of an increased amount of METH1 or METH2. Also provided are methods for inhibiting angiogenesis using METH1 or METH2.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 514/012.000
INCLS: 514/044.000
NCL NCLM: 514/012.000
NCLS: 514/044.000

L6 ANSWER 8 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2003:288225 USPATFULL
TITLE: Lawsonia intracellularis proteins, and related methods and materials
INVENTOR(S): Rosey, Everett L., Preston, CT, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003202983	A1	20031030
APPLICATION INFO.:	US 2003-449462	A1	20030529 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-689065, filed on 12 Oct 2000, GRANTED, Pat. No. US 6605696

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-160922P	19991022 (60)
	US 1999-163858P	19991105 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KOHN & ASSOCIATES, PLLC, Suite 410, 30500 Northwestern Highway, Farmington Hills, MI, 48334
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 3976
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Isolated polynucleotide molecules contain a nucleotide sequence that encodes a L. intracellularis HtrA, PonA, HypC, LysS, YcfW, ABC1, or Omp100 protein, a substantial portion of the sequences, or a homologous sequence. Related polypeptides, immunogenic compositions and assays are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/190.100
INCLS: 424/200.100; 435/069.300; 435/320.100; 435/252.300; 530/350.000; 536/023.700
NCL NCLM: 424/190.100
NCLS: 424/200.100; 435/069.300; 435/320.100; 435/252.300; 530/350.000; 536/023.700

L6 ANSWER 9 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2003:225309 USPATFULL
TITLE: Lawsonia derived gene and related flge polypeptides, peptides and proteins and their uses
INVENTOR(S): Panaccio, Michael, Victoria, AUSTRALIA
Rosey, Everett Lee, Preston, CT, UNITED STATES
Sinistaj, Meri, Victoria, AUSTRALIA
Hasse, Detlef, Victoria, AUSTRALIA
Parsons, Jim, Victoria, AUSTRALIA
Ankenbauer, Robert Gerard, Pawcatuck, CT, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003157120	A1	20030821	
APPLICATION INFO.:	US 2002-9823	A1	20020813	(10)
	WO 2001-AU437		20010511	

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-60133973	19990513

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614
NUMBER OF CLAIMS: 39
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 16 Drawing Page(s)
LINE COUNT: 2857
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates generally to therapeutic compositions for the treatment and/or prophylaxis of intestinal disease conditions in animals and birds caused or exacerbated by Lawsonia intracellularis or similar or otherwise related microorganism. In particular, the present invention provides a novel gene derived from Lawsonia intracellularis which encodes an immunogenic FlgE peptide, polypeptide or protein that is particularly useful as an antigen in vaccine preparation for conferring humoral immunity against Lawsonia intracellularis and related pathogens in animal hosts. The present invention is also directed to methods for the treatment and/or prophylaxis of such intestinal disease conditions and to diagnostic agents and procedures for detecting Lawsonia intracellularis or similar or otherwise related microorganisms.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/190.100
INCLS: 530/350.000; 530/388.500; 435/007.320; 536/023.200; 435/006.000
NCL NCLM: 424/190.100
NCLS: 530/350.000; 530/388.500; 435/007.320; 536/023.200; 435/006.000

L6 ANSWER 10 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2003:216219 USPATFULL
TITLE: Lawsonia intracellularis proteins, and related methods and materials
INVENTOR(S): Rosey, Everett L., Preston, CT, United States
PATENT ASSIGNEE(S): Pfizer, Inc., New York, NY, United States (U.S. corporation)
Pfizer Products, Inc., Groton, CT, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6605696	B1	20030812	
APPLICATION INFO.:	US 2000-689065		20001012	(9)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 1999-160922P	19991022	(60)

US 1999-163868P 19991105 (60)
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Smith, Lynette R. F.
ASSISTANT EXAMINER: Ford, Vanessa L
LEGAL REPRESENTATIVE: Ginsburg, Paul H., Ling, Lorraine B., Kohn & Associates, PLLC
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 3846
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Isolated polynucleotide molecules contain a nucleotide sequence that encodes a L. intracellularis HtrA, PonA, HypC, LysS, YcfW, ABC1, or Omp100 protein, a substantial portion of the sequences, or a homologous sequence. Related polypeptides, immunogenic compositions and assays are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 530/300.000
INCLS: 424/190.100; 424/192.100; 424/193.100; 424/243.100; 424/245.000; 424/252.100; 530/300.000; 530/324.000; 530/388.200
NCL NCLM: 530/300.000
NCLS: 424/190.100; 424/192.100; 424/193.100; 424/243.100; 424/245.100; 424/252.100; 530/324.000; 530/388.200

L6 ANSWER 11 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2003:152333 USPATFULL
TITLE: Novel therapeutic compositions for treating infection by Lawsonia spp.
INVENTOR(S): Rosey, Everett Lee, Preston, CT, UNITED STATES
King, Kendall Wayne, Waterford, CT, UNITED STATES
Good, Robert Trygve, Romsey, AUSTRALIA
Strugnell, Richard Anthony, Hawthorn, AUSTRALIA

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003103999	A1	20030605	
APPLICATION INFO.:	US 2001-10160	A1	20011109	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	AU 2000-1381	20001120
	US 2000-249595P	20001117 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614
NUMBER OF CLAIMS: 50
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Page(s)
LINE COUNT: 4819
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates generally to therapeutic compositions for the treatment and/or prophylaxis of intestinal disease conditions in animals and birds caused or exacerbated by Lawsonia intracellularis or

similar or otherwise related microorganism. In particular, the present invention provides a novel gene derived from Lawsonia intracellularis, which encodes an immunogenic polypeptide that is particularly useful as an antigen in a vaccine preparation for conferring humoral immunity against Lawsonia intracellularis and related pathogens in animal hosts, wherein said polypeptide is selected from the group consisting of flhB, fliR, ntrC, glnH, motA, motB, tlyC, ytfM, and ytfN polypeptides, or a homologue, analogue or derivative of any one or more of said polypeptides. The present invention is also directed to methods for the treatment and/or prophylaxis of such intestinal disease conditions and to diagnostic agents and procedures for detecting Lawsonia intracellularis or similar or otherwise related microorganisms.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/190.100
INCLS: 530/350.000; 435/069.300; 435/252.300; 435/320.100; 536/023.200
NCL NCLM: 424/190.100
NCLS: 530/350.000; 435/069.300; 435/252.300; 435/320.100; 536/023.200

L6 ANSWER 12 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2003:29860 USPATFULL
TITLE: Lawsonia intracellularis proteins, and related methods and materials
INVENTOR(S): Rosey, Everett L., Preston, CT, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003021802	A1	20030130
APPLICATION INFO.:	US 2002-210296	A1	20020801 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2000-689065, filed on 12 Oct 2000, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-160922P	19991022 (60)
	US 1999-163858P	19991105 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KOHN & ASSOCIATES, PLLC, SUITE 410, 30500 NORTHWESTERN HWY., FARMINGTON HILLS, MI, 48334
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 3947
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Isolated polynucleotide molecules contain a nucleotide sequence that encodes a L. intracellularis HtrA, PonA, HypC, LysS, YcfW, ABC1, or Omp100 protein, a substantial portion of the sequences, or a homologous sequence. Related polypeptides, immunogenic compositions and assays are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/190.100
INCLS: 435/219.000; 435/320.100; 435/252.300; 536/023.200; 435/069.300
NCL NCLM: 424/190.100
NCLS: 435/219.000; 435/320.100; 435/252.300; 536/023.200; 435/069.300

L6 ANSWER 13 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2000:149713 USPATFULL
TITLE: Methods for modulating T cell survival by modulating bcl-X.sub.L protein level
INVENTOR(S): June, Carl H., 7 Harlow Ct., Rockville, MD, United States 20850
Thompson, Craig B., 1375 E. 57th St., Chicago, IL, United States 60637

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6143291		20001107
APPLICATION INFO.:	US 1995-481739		19950607 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-435518, filed on 4 May 1995, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Hauda, Karen M.
LEGAL REPRESENTATIVE: Lahive & Cockfield, LLP
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1,3
NUMBER OF DRAWINGS: 21 Drawing Figure(s); 13 Drawing Page(s)
LINE COUNT: 2507
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods for protecting a T cell from cell death are described. The methods involve contacting the T cell with an agent which augments the bcl-X.sub.L protein level in the T cell such that it is protected from cell death. The invention further pertains to methods for increasing the susceptibility of a T cell to cell death, comprising contacting the T cell with at least one agent which decreases bcl-X.sub.L protein level in the T cell. Both in vivo and in vitro methods are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/093.210
INCLS: 435/375.000; 435/320.100; 435/172.300
NCL NCLM: 424/093.210
NCLS: 435/320.100; 435/375.000; 435/455.000

FILE 'MEDLINE' ENTERED AT 14:16:03 ON 03 SEP 2004
L7 0 SEA FILE=MEDLINE ABB=ON PLU=ON (LAWSONIA BACTERIA AND ANTIBODIES)/CT

FILE 'CAPLUS' ENTERED AT 14:16:46 ON 03 SEP 2004
L8 0 S PALK14 OR (PALK OR P ALK)(W)14
L9 1 S 207155
L10 0 S L9(S)(ATCC OR CULTURE)

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO, CABA, AGRICOLA, VETU, VETB' ENTERED AT 14:17:53 ON 03 SEP 2004)
L11 1 S L8 OR L10
L12 0 S L11 NOT L3

(FILE 'USPATFULL' ENTERED AT 14:18:39 ON 03 SEP 2004)
L13 0 S L8 OR L10

```
     (FILE 'CAPLUS' ENTERED AT 14:19:34 ON 03 SEP 2004)
L14            1 SEA ABB=ON  PLU=ON  (SODC OR SOD C) AND (LAWSON? OR L)(W)INTRAC
                 ELLULAR?
L15            0 SEA ABB=ON  PLU=ON  L14 NOT L2

     FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS,
     JAPIO, CABA, AGRICOLA, VETU, VETB' ENTERED AT 14:20:34 ON 03 SEP 2004
L16            4 SEA ABB=ON  PLU=ON  L14
L17            0 SEA ABB=ON  PLU=ON  L16 NOT L3

     FILE 'USPATFULL' ENTERED AT 14:21:15 ON 03 SEP 2004
L18            2 SEA ABB=ON  PLU=ON  (SODC OR SOD C) AND (LAWSON? OR L)(W)INTRAC
                 ELLULAR?
L19            0 SEA ABB=ON  PLU=ON  L18 NOT L6

     (FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH,
     JICST-EPLUS, JAPIO, CABA, AGRICOLA, VETU, VETB, USPATFULL' ENTERED AT
     14:22:02 ON 03 SEP 2004)                                  -Author (s)
L20          122 SEA ABB=ON  PLU=ON  "ANKENBAUER R"?/AU
L21           92 SEA ABB=ON  PLU=ON  "HASSE D"?/AU
L22          185 SEA ABB=ON  PLU=ON  "PANACCIO M"?/AU
L23          138 SEA ABB=ON  PLU=ON  "ROSEY E"?/AU
L24        10842 SEA ABB=ON  PLU=ON  "WRIGHT C"?/AU
L25            2 SEA ABB=ON  PLU=ON  L20 AND L21 AND L22 AND L23 AND L24
L26           10 SEA ABB=ON  PLU=ON  L20 AND (L21 OR L22 OR L23 OR L24)
L27           15 SEA ABB=ON  PLU=ON  L21 AND (L22 OR L23 OR L24)
L28            7 SEA ABB=ON  PLU=ON  L22 AND (L23 OR L24)
L29            2 SEA ABB=ON  PLU=ON  L23 AND L24
L30           13 SEA ABB=ON  PLU=ON  (L25 OR L27 OR L26 OR L28 OR L29) AND
                 (LAWSON? OR L)(W) INTRACELLULAR?
L31           18 SEA ABB=ON  PLU=ON  L25 OR L26 OR L27 OR L28 OR L29 OR L30
L32           10 DUP REM L31 (8 DUPLICATES REMOVED)

L32  ANSWER 1 OF 10  BIOSIS  COPYRIGHT (c) 2004 The Thomson Corporation.  on
     STN                                                    DUPLICATE 1
ACCESSION NUMBER:    2004:257303  BIOSIS
DOCUMENT NUMBER:     PREV200400257303
TITLE:               Proteins from actinobacillus pleuropneumoniae.
AUTHOR(S):           Ankenbauer, Robert G. [Inventor, Reprint Author];
                     Baarsch, Mary Jo [Inventor]; Campos, Manuel [Inventor];
                     Keich, Robin [Inventor]; Rosey, Everett
                     [Inventor]; Suiter, Brian [Inventor]; Warren-Stewart, Lynn
                     [Inventor]
CORPORATE SOURCE:    Pawcatuck, CT, USA
                     ASSIGNEE: Pfizer Inc.; Pfizer Products Inc.
PATENT INFORMATION:  US 6713071 March 30, 2004
SOURCE:              Official Gazette of the United States Patent and Trademark
                     Office Patents, (Mar 30 2004) Vol. 1280, No. 5.
                     http://www.uspto.gov/web/menu/patdata.html. e-file.
                     ISSN: 0098-1133 (ISSN print).
DOCUMENT TYPE:       Patent
LANGUAGE:            English
ENTRY DATE:          Entered STN: 12 May 2004
                     Last Updated on STN: 12 May 2004
AB   The present invention is directed to five novel, low molecular weight
     proteins from Actinobacillus pleuropneumoniae (APP), which are capable of
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inducing, or contributing to the induction of, a protective immune response in swine against APP. The present invention is further directed to polynucleotide molecules having nucleotide sequences that encode the proteins, as well as vaccines comprising the proteins or polynucleotide molecules, and methods of making and using the same.

L32 ANSWER 2 OF 10 USPATFULL on STN

ACCESSION NUMBER:	2003:225309 USPATFULL			
TITLE:	Lawsonia derived gene and related flge polypeptides, peptides and proteins and their uses			
INVENTOR(S):	**Panaccio, Michael**, Victoria, AUSTRALIA **Rosey, Everett Lee**, Preston, CT, UNITED STATES Sinistaj, Meri, Victoria, AUSTRALIA **Hasse, Detlef**, Victoria, AUSTRALIA Parsons, Jim, Victoria, AUSTRALIA **Ankenbauer, Robert Gerard**, Pawcatuck, CT, UNITED STATES			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003157120	A1	20030821	
APPLICATION INFO.:	US 2002-9823	A1	20020813	(10)
	WO 2001-AU437		20010511	
	NUMBER		DATE	
PRIORITY INFORMATION:	US 1999-60133973		19990513	
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			
LEGAL REPRESENTATIVE:	KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614			
NUMBER OF CLAIMS:	39			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	16 Drawing Page(s)			
LINE COUNT:	2857			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates generally to therapeutic compositions for the treatment and/or prophylaxis of intestinal disease conditions in animals and birds caused or exacerbated by **Lawsonia intracellularis** or similar or otherwise related microorganism. In particular, the present invention provides a novel gene derived from **Lawsonia intracellularis** which encodes an immunogenic FlgE peptide, polypeptide or protein that is particularly useful as an antigen in vaccine preparation for conferring humoral immunity against **Lawsonia intracellularis** and related pathogens in animal hosts. The present invention is also directed to methods for the treatment and/or prophylaxis of such intestinal disease conditions and to diagnostic agents and procedures for detecting **Lawsonia intracellularis** or similar or otherwise related microorganisms.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L32 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2

ACCESSION NUMBER:	2000:824297 CAPLUS
DOCUMENT NUMBER:	134:1364

TITLE: Lawsonia-derived gene tlyA and related hemolysin polypeptides, peptides and proteins and their uses for diagnosis and treatment of avian and porcine infections

INVENTOR(S): **Panaccio, Michael; Rosey, Everett Lee; Hasse, Detlef; Ankenbauer, Robert Gerard**

PATENT ASSIGNEE(S): Pfizer Products Inc, USA; Agriculture Victoria Services Pty Ltd; Pig Research and Development Corporation

SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2000069906	A1	20001123	WO 2000-AU439		20000511
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
EP 1177213	A1	20020206	EP 2000-924978		20000511
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
NZ 515363	A	20030725	NZ 2000-515363		20000511
AU 775323	B2	20040729	AU 2000-43861		20000511
PRIORITY APPLN. INFO.:			US 1999-134022P	P	19990513
			WO 2000-AU439	W	20000511

AB The present invention relates generally to therapeutic compns. for the treatment and/or prophylaxis of intestinal disease conditions in animals and birds caused or exacerbated by **Lawsonia intracellularis** or similar or otherwise related microorganism. In particular, the present invention provides a novel gene derived from **Lawsonia intracellularis** which encodes an immunogenic TylA hemolysin peptide, polypeptide or protein that is particularly useful as an antigen in vaccine preparation for conferring humoral immunity against **Lawsonia intracellularis** and related pathogens in animal hosts. The present invention is also directed to methods for the treatment and/or prophylaxis of such intestinal disease conditions and to diagnostic agents and procedures for detecting **Lawsonia intracellularis** or similar or otherwise related microorganisms.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 2000:824296 CAPLUS

DOCUMENT NUMBER: 134:14022

TITLE: Lawsonia-derived gene ompH and related outer membrane

protein H polypeptides, peptides and proteins and their uses for diagnosis and treatment of avian and porcine infections

INVENTOR(S): **Hasse, Detlef; Panaccio, Michael;** Sinistaj, Meri

PATENT ASSIGNEE(S): Pig Research and Development Corporation, Australia; Agriculture Victoria Services Pty Ltd

SOURCE: PCT Int. Appl., 85 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069905	A1	20001123	WO 2000-AU438	20000511
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1183268	A1	20020306	EP 2000-924977	20000511
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000011290	A	20020521	BR 2000-11290	20000511
NZ 515330	A	20030429	NZ 2000-515330	20000511
JP 2003521881	T2	20030722	JP 2000-618321	20000511
AU 767390	B2	20031106	AU 2000-43860	20000511

PRIORITY APPLN. INFO.:

US 1999-133986P	P	19990513
WO 2000-AU438	W	20000511

AB The present invention relates generally to therapeutic compns. for the treatment and/or prophylaxis of intestinal disease conditions in animals and birds caused or exacerbated by **Lawsonia intracellularis** or similar or otherwise related microorganism. In particular, the present invention provides a novel gene derived from **Lawsonia intracellularis** which encodes an immunogenic OmpH outer membrane peptide, polypeptide or protein that is particularly useful as an antigen in vaccine preparation for conferring humoral immunity against **Lawsonia intracellularis** and related pathogens in animal hosts. The present invention is also directed to methods for the treatment and/or prophylaxis of such intestinal disease conditions and to diagnostic agents and procedures for detecting **Lawsonia intracellularis** or similar or otherwise related microorganisms.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 4

ACCESSION NUMBER: 2000:824295 CAPLUS

DOCUMENT NUMBER: 133:359825

TITLE: Lawsonia-derived gene flgE and related flagellar hook polypeptides, peptides and proteins and their uses for

diagnosis and treatment of avian and porcine infections

INVENTOR(S): **Panaccio, Michael; Rosey, Everett Lee**; Sinistaj, Meri; **Hasse, Detlef**; Parsons, Jim; **Ankenbauer, Robert Gerard**

PATENT ASSIGNEE(S): Pfizer Products Inc., USA; Agriculture Victoria Services Pty Ltd; Pig Research and Development Corporation

SOURCE: PCT Int. Appl., 97 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069904	A1	20001123	WO 2000-AU437	20000511
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
BR 2000011294	A	20020226	BR 2000-11294	20000511
EP 1181315	A1	20020227	EP 2000-924976	20000511
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2003516113	T2	20030513	JP 2000-618320	20000511
NZ 515331	A	20030725	NZ 2000-515331	20000511
AU 771376	B2	20040318	AU 2000-43859	20000511
US 2003157120	A1	20030821	US 2002-9823	20020813
PRIORITY APPLN. INFO.:			US 1999-133973P P	19990513
			WO 2000-AU437 W	20000511

AB The present invention relates generally to therapeutic compns. for the treatment and/or prophylaxis of intestinal disease conditions in animals and birds caused or exacerbated by **Lawsonia intracellularis** or similar or otherwise related microorganism. In particular, the present invention provides a novel gene derived from **Lawsonia intracellularis** which encodes an immunogenic FlgE flagellar hook peptide, polypeptide or protein that is particularly useful as an antigen in vaccine preparation for conferring humoral immunity against **Lawsonia intracellularis** and related pathogens in animal hosts. The present invention is also directed to methods for the treatment and/or prophylaxis of such intestinal disease conditions and to diagnostic agents and procedures for detecting **Lawsonia intracellularis** or similar or otherwise related microorganisms.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 5

ACCESSION NUMBER: 2000:824294 CAPLUS

DOCUMENT NUMBER: 133:359824

TITLE: Lawsonia-derived gene sodC and related superoxide dismutase polypeptides, peptides and proteins and their uses for diagnosis and treatment of avian and porcine infections

INVENTOR(S): **Ankenbauer, Robert Gerard; Hasse, Detlef; Panaccio, Michael; Rosey, Everett Lee; Wright, Catherine**

PATENT ASSIGNEE(S): Pfizer Products, Inc., USA; Pig Research and Development Corp.; Agriculture Victoria Services Pty., Ltd.

SOURCE: PCT Int. Appl., 85 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069903	A1	20001123	WO 2000-AU436	20000511
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1177212	A1	20020206	EP 2000-924975	20000511
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000011292	A	20020226	BR 2000-11292	20000511
JP 2003501013	T2	20030114	JP 2000-618319	20000511
NZ 515332	A	20040130	NZ 2000-515332	20000511
PRIORITY APPLN. INFO.:			US 1999-133989P P	19990513
			WO 2000-AU436 W	20000511

AB The present invention relates generally to therapeutic compns. for the treatment and/or prophylaxis of intestinal disease conditions in animals and birds caused or exacerbated by **Lawsonia intracellularis** or similar or otherwise related microorganism. In particular, the present invention provides a novel gene derived from **Lawsonia intracellularis** which encodes an immunogenic SodC superoxide dismutase peptide, polypeptide or protein that is particularly useful as an antigen in vaccine preparation for conferring humoral immunity against **Lawsonia intracellularis** and related pathogens in animal hosts. The present invention is also directed to methods for the treatment and/or prophylaxis of such intestinal disease conditions and to diagnostic agents and procedures for detecting **Lawsonia intracellularis** or similar or otherwise related microorganisms.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 7 OF 10 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2000-320438 [28] WPIDS
DOC. NO. NON-CPI: N2000-240555
DOC. NO. CPI: C2000-097319
TITLE: Low molecular weight Actinobacillus pleuropneumoniae proteins and DNA encoding them, for use as vaccines against the bacteria in swine.
DERWENT CLASS: B04 C06 D16 S03
INVENTOR(S): **ANKENBAUER, R G**; BAARSCH, M J; CAMPOS, M; KEICH, R L; **ROSEY, E L**; STEWART, L M W; SUITER, B T; WARREN, S L M; WARREN-STEWART, L M; KEICH, R; **ROSEY, E**; SUITER, B; WARREN-STEWART, L
PATENT ASSIGNEE(S): (PFIZ) PFIZER PROD INC; (PFIZ) PFIZER INC
COUNTRY COUNT: 34
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 1001025	A2	20000517	(200028)*	EN	81
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
JP 2000125889	A	20000509	(200032)		72
AU 9955987	A	20000608	(200035)		
CA 2285749	A1	20000422	(200037)	EN	
NZ 500540	A	20000825	(200049)		
CN 1259522	A	20000712	(200054)		
BR 9905111	A	20010320	(200123)		
MX 9909688	A1	20000601	(200133)		
ZA 9906648	A	20010627	(200140)		111
JP 2003047489	A	20030218	(200323)		71
JP 3440221	B2	20030825	(200357)		69
AU 767421	B	20031106	(200401)		
JP 2004041219	A	20040212	(200413)		64
US 6713071	B1	20040330	(200423)		

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
EP 1001025	A2		EP 1999-308262	19991020
JP 2000125889	A		JP 1999-301672	19991022
AU 9955987	A		AU 1999-55987	19991021
CA 2285749	A1		CA 1999-2285749	19991020
NZ 500540	A		NZ 1999-500540	19991021
CN 1259522	A		CN 1999-125454	19991022
BR 9905111	A		BR 1999-5111	19991022
MX 9909688	A1		MX 1999-9688	19991021
ZA 9906648	A		ZA 1999-6648	19991021
JP 2003047489	A	Div ex	JP 1999-301672	19991022
			JP 2002-153105	19991022
JP 3440221	B2		JP 1999-301672	19991022
AU 767421	B		AU 1999-55987	19991021
JP 2004041219	A	Div ex	JP 2002-153105	19991022
			JP 2003-299144	20030822
US 6713071	B1	Provisional	US 1998-105285P	19981022
			US 1999-418980	19991014

Searcher : Shears 571-272-2528

FILING DETAILS:

PATENT NO	KIND	PATENT NO
JP 3440221	B2 Previous Publ.	JP 2000125889
AU 767421	B Previous Publ.	AU 9955987

PRIORITY APPLN. INFO: US 1998-105285P 19981022; US 1999-418980 19991014

AN 2000-320438 [28] WPIDS

AB EP 1001025 A UPAB: 20000613

NOVELTY - A substantially purified protein (I), comprising about residues 20-172, 2-215, 28-258, 20-364 or 20-369 of a 172, 215, 258, 364, or 369 amino acid sequence, respectively, all fully defined in the specification, is new. (I) is a low molecular weight Actinobacillus pleuropneumoniae (APP) protein, designated Omp20, OmpW, Opm27, OmpA1 and OmpA2.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a purified polypeptide homologous to (I), or an analog or derivative of it;

(2) a fusion protein, comprising (I) joined to a carrier or fusion partner;

(3) an isolated polynucleotide homologous to a polynucleotide encoding Omp20, OmpW, Omp27, OmpA1 or OmpA2;

(4) an isolated polynucleotide encoding residues 1-19, 1-21, 1-27, 1-19 or 1-19 of the 172, 215, 258, 364 or 369 residue sequences, respectively;

(5) an isolated polynucleotide encoding (I) or the protein of (1) or (2);

(6) an oligonucleotide which can hybridize under stringent conditions to a 1018, 1188, 1171, 1922, or 1319 nucleotide sequence, all fully defined in the specification;

(7) a recombinant vector, comprising the polynucleotide of (5);

(8) a transformed cell, comprising the vector of (7);

(9) a vaccine against APP, comprising an antigen selected from (I), the polypeptide of (1) or (2), and the polynucleotide of (5), capable of inducing, or contributing to the induction of a protective immune response against APP in swine, and a carrier or diluent;

(10) a method of preparing a vaccine of (9), comprising mixing the antigen and carrier;

(11) a vaccine kit for vaccinating swine, comprising a container comprising the antigen of (9);

(12) an isolated antibody specific for (I);

(13) a diagnostic kit comprising (I) or the polypeptide of (1) or (2), and a secondary antibody directed against porcine antibodies, in a separate container;

(14) a diagnostic kit, comprising the antibody of (12), and a secondary antibody which binds to different epitopes on the APP protein, or is directed against the primary antibody, in a separate container; and

(15) a diagnostic kit, comprising a polynucleotide which can specifically hybridize or amplify an APP-specific polynucleotide molecule.

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - Vaccine.

USE - The polypeptides and polynucleotides of the invention can be used as a vaccine against APP in swine. They can also be used as reagents in the diagnosis of APP infections (claimed).

Dwg.0/6

L32 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 6
ACCESSION NUMBER: 1997:457165 CAPLUS
DOCUMENT NUMBER: 127:94116
TITLE: **Lawsonia intracellularis** immunogenic components identification, DNA sequences, and uses for animal intestine infection vaccine or diagnosis
INVENTOR(S): **Panaccio, Michael; Hasse, Detlef**
PATENT ASSIGNEE(S): Daratech Pty. Ltd., Australia; Pig Research and Development Corporation; Panaccio, Michael; Hasse, Detlef
SOURCE: PCT Int. Appl., 94 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9720050	A1	19970605	WO 1996-AU767	19961129
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2236574	AA	19970605	CA 1996-2236574	19961129
AU 9676141	A1	19970619	AU 1996-76141	19961129
AU 718333	B2	20000413		
EP 871735	A1	19981021	EP 1996-938863	19961129
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CN 1203630	A	19981230	CN 1996-198666	19961129
BR 9611623	A	19991228	BR 1996-11623	19961129
JP 2000502054	T2	20000222	JP 1997-520010	19961129
NZ 322398	A	20000228	NZ 1996-322398	19961129

PRIORITY APPLN. INFO.:

AU 1995-6910	A	19951130
AU 1995-6911	A	19951130
WO 1996-AU767	W	19961129

AB The present invention relates generally to therapeutic compns. for the treatment and/or prophylaxis of intestinal disease conditions in animals and birds caused or exacerbated by **Lawsonia intracellularis** or similar or otherwise related microorganism. The present invention also contemplates methods for the treatment and/or prophylaxis of such intestinal disease conditions and to diagnostic agents and procedures for detecting **Lawsonia intracellularis** or similar or otherwise related microorganism. The **Lawsonia intracellularis** genomic library was screened with immunoscreened with anti-**L. intracellularis** sera. Clones found to be pos. according to immunoscreening were sequenced. GroEL and GroES proteins are two immunogenic components that were identified. Examples

also included immunofluorescent detection of **L. intracellularis** bacteria in pig feces, formalin-killed vaccines, and putative vaccine candidate sequences.

L32 ANSWER 9 OF 10 CABA COPYRIGHT 2004 CABI on STN
ACCESSION NUMBER: 97:68300 CABA
DOCUMENT NUMBER: 19972206417
TITLE: Application of a polymerase chain reaction assay to diagnose proliferative enteritis in pig herds
AUTHOR: Holyoake, P. K.; Jones, G. F.; Davies, P. R.; Foss, D. L.; **Panaccio, M.; Hasse, D.**; Murtaugh, M. P.; Hennessy, D. P. [EDITOR]; Cranwell, P. D. [EDITOR]
CORPORATE SOURCE: Agriculture Victori. Bendigo Agriculture Centre, Bendigo, Vic., 3554, Australia.
SOURCE: Manipulating pig production 5. Proceedings of the Fifth Biennial Conference of the Australasian Pig Science Association (APSA) held in Canberra, ACT on November 26 to 29, 1995, (1995) pp. 171. 6 ref.
Publisher: Australasian Pig Science Association,. Werribee
Price: Abstract only; Conference paper
Meeting Info.: Manipulating pig production 5. Proceedings of the Fifth Biennial Conference of the Australasian Pig Science Association (APSA) held in Canberra, ACT on November 26 to 29, 1995.
ISBN: 0-646-25622-X
PUB. COUNTRY: Australia
DOCUMENT TYPE: Journal
LANGUAGE: English
ENTRY DATE: Entered STN: 19970612
Last Updated on STN: 19970612

L32 ANSWER 10 OF 10 MEDLINE on STN DUPLICATE 7
ACCESSION NUMBER: 76204010 MEDLINE
DOCUMENT NUMBER: PubMed ID: 945017
TITLE: Prolonged neuromuscular blockade associated with trimethaphan: a case report.
AUTHOR: Wilson S L; Miller R N; **Wright C; Hasse D**
SOURCE: Anesthesia and analgesia, (1976 May-Jun) 55 (3) 353-6.
Journal code: 1310650. ISSN: 0003-2999.
PUB. COUNTRY: United States
DOCUMENT TYPE: (CASE REPORTS)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197608
ENTRY DATE: Entered STN: 19900313
Last Updated on STN: 19900313
Entered Medline: 19760802

AB A case of prolonged neuromuscular blockade associated with the administration of trimethaphan to a neurosurgical patient aged 29 is believed to be the possible result of interaction between trimethaphan, a ganglionic-blocking drug, and muscle relaxant. This possibility should be kept in mind when the administration of trimethaphan is being considered.

10/009916

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Searcher : Shears 571-272-2528